

The Hilltop Institute



analysis to advance the health of vulnerable populations

Evaluation of the HealthChoice Program CY 2011 to CY 2015

September 8, 2017

Evaluation of the HealthChoice Program
CY 2011 to CY 2015

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Evaluation of the HealthChoice Program CY 2011 to CY 2015

Executive Summary

HealthChoice—Maryland’s statewide mandatory Medicaid and Children’s Health Insurance Program (CHIP) managed care system—was implemented in 1997 under authority of Section 1115 of the Social Security Act. Participants in the HealthChoice program include children enrolled in the Maryland Children’s Health Program (MCHP), which is Maryland’s name for CHIP. In the remainder of this document, when referring to Medicaid, the term includes the CHIP program. As of the end of calendar year (CY) 2015, over 83 percent of the state’s Medicaid population was enrolled in the HealthChoice program. HealthChoice participants choose one of the participating managed care organizations (MCOs) and a primary care provider (PCP) from their MCO’s network to oversee their medical care. HealthChoice enrollees receive the same comprehensive benefits as those available to Maryland Medicaid enrollees through the fee-for-service (FFS) system.

Since the inception of HealthChoice, the Maryland Department of Health (the Department) has conducted six comprehensive evaluations of the program as part of the renewal process for its authorizing 1115 waiver. Between waiver renewals, the Department completes an annual evaluation for HealthChoice stakeholders. This report constitutes the 2017 annual evaluation of the HealthChoice program, which includes data from CY 2011 through CY 2015. Key findings from this evaluation are presented below.

Plan performance has been affected over the years by the addition of new MCOs and implementation of the Affordable Care Act (ACA). Between CY 2011 and CY 2013, a total of seven MCOs participated in the program. In CY 2013, one MCO—Coventry (also known as Diamond Plan)—withdrew, while a new MCO—Riverside Health of Maryland (now known as the University of Maryland Health Partners)—joined the program. In CY 2014, Kaiser Permanente of the Mid-Atlantic States joined the HealthChoice program, bringing the total to eight participating MCOs. Due to limited time to get new enrollees into care and challenges with initial data submissions to the Department’s Medicaid Management Information System (MMIS2), the entrance of the new MCOs negatively affected overall program performance on some Healthcare Effectiveness Data and Information Set® (HEDIS) measures and may make the program’s performance appear artificially low in CY 2015. HEDIS scores were affected because the methodology uses a simple average to calculate overall HealthChoice HEDIS scores instead of an average weighted by enrollment. The two new MCOs—University of Maryland Health Partners and Kaiser Permanente—represented approximately 6 percent of HealthChoice program enrollment in CY 2015. The expansion of benefits under the ACA to adults under age 65 years with incomes up to 138 percent of the federal poverty level (FPL) also impacted program performance in CY 2014 and CY 2015. The ACA expansion participants, many who were gaining Medicaid coverage for the first time, may have had limited health literacy resulting in



reduced access to care until participants became more familiar with accessing care through Medicaid.

Coverage and Access

Two of the goals of the HealthChoice program are to expand coverage to additional residents with low income through resources generated from managed care efficiencies and to improve access to health care services for the Medicaid population. The following key findings from the evaluation are related to these goals:

- Beginning in January 2014, under the ACA, Maryland expanded Medicaid eligibility to adults under age 65 years with incomes up to 138 percent of the FPL. In January 2014, 139,427 participants had gained coverage through this expansion. This figure includes more than 90,000 participants in the former Primary Adult Care (PAC) program who transitioned into the full-benefit Medicaid program. By December 2015, 244,891 participants were enrolled in Medicaid through an expansion coverage group. Of the expansion population with 12 months of enrollment in CY 2015, 37.3 percent were aged 19 to 34 years, 27.4 percent were aged 35 to 49 years, and 35.3 percent were aged 50 to 64 years.
- Overall HealthChoice enrollment increased by 31.5 percent, from 759,905 participants in CY 2011 to 999,252 participants in CY 2015. These totals reflect individuals who were enrolled as of December 31 of each respective year, thus providing a snapshot of typical program enrollment on a given day.
- Looking at service utilization as a measure of access, the ambulatory care visit rate increased between CY 2011 and CY 2013. However, across the complete evaluation period, the ambulatory care visit rate decreased, from 78.4 percent in CY 2011 to 76.1 percent in CY 2015. Expansion enrollees had a lower rate of ambulatory care visits than the rest of the Medicaid population, driving this decrease (Table 39). HealthChoice participants in the rural regions of the state had equal access to ambulatory care as participants in urban and suburban regions.
- Among HealthChoice participants, the outpatient emergency department (ED) visit rate dropped from 33.9 percent in CY 2011 to 30.4 percent in CY 2015.
- The percentage of HealthChoice participants with at least one inpatient admission decreased by 5.3 percentage points during the evaluation period.
- Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey results indicate that most participants report that they usually or always receive needed care and receive care quickly, and rates generally align with national benchmarks.



Medical Home

Another goal of the HealthChoice program is to provide patient-focused, comprehensive, and coordinated care by providing each member with a medical home. One method of assessing this goal is to measure whether participants can identify with and effectively navigate a medical home. With a greater understanding of the resources available to them, HealthChoice participants should be able to seek care for non-emergent conditions in an ambulatory care setting before resorting to using the ED or letting an ailment exacerbate to the extent that it could warrant an inpatient admission. The following key findings from the evaluation are related to this goal:

- The rate of potentially avoidable ED visits decreased by 1.8 percentage points between CY 2011 and CY 2015.
- Among HealthChoice adults with an MCO or FFS inpatient admission, the percentage of participants with a Prevention Quality Indicator (PQI) designation remained stable throughout the evaluation period at 8 or 9 percent.

Under Maryland's new hospital All-Payer Model Agreement with the Centers for Medicare & Medicaid Services (CMS), the state is monitoring a number of hospital quality measures, including PQI admissions across Medicaid, Medicare, and commercial payers. The Model Agreement also requires global budget limits for hospitals, which reduces hospitals' incentives to increase admissions. The Department will use these tools to continue to monitor the rate of PQI admissions and will research policies to reduce their frequency.

Quality of Care

Another goal of the HealthChoice program is to improve the quality of health care services. The Department employs an extensive system of quality measurement and improvement compared with nationally recognized performance standards. The following key findings from the evaluation are related to this goal:

- Rates for well-child and well-care visits, as well as immunization rates, among Maryland's HealthChoice population were consistently higher than national Medicaid averages. Blood lead screening rates for children aged 12 to 23 months and 24 to 35 months also improved.
- Breast cancer screening rates improved during the evaluation period by nearly 20 percentage points, contributing to better preventive care for women and remaining above the national Medicaid average since CY 2013.
- The screening rate for colorectal cancer dropped by 4.3 percentage points between CY 2011 and CY 2015. However, the rate increased by 2.9 percentage points from CY 2014 to CY 2015, suggesting that this overall downward trend in screening rates may be in the process of a correction.



- Regarding the quality of care for chronic conditions, the percentage of participants with diabetes who received an eye exam decreased by nearly 11 percentage points between CY 2011 and CY 2015, while the rate of hemoglobin A1c (HbA1c) screenings rose by about 8 percentage points. These rate changes may be related to the removal of vision screening and the addition of HbA1c screening to the value-based purchasing performance measures, which occurred after CY 2013. Both measures were above the national Medicaid average for CY 2015.

Some of the fluctuations in health care utilization can be explained by a large influx of adults into the HealthChoice population as a result of the ACA expansion. These new participants took longer to engage in appropriate primary care treatment, which affected the scores of HEDIS measures that are based on service use. In addition, new MCOs joined HealthChoice in CY 2013 and CY 2014, and it took time for their encounter data to become complete. Although the new MCOs served few members, the overall HEDIS scores were dramatically affected because the methodology used to calculate overall HealthChoice HEDIS scores applies a simple average instead of a weighted average. This is evidenced by the fact that the six MCOs that participated in the HealthChoice program prior to the addition of the two new MCOs have maintained higher, more consistent HEDIS scores.

Special Topics

As part of the goal of improving the quality of health care services, the Department monitors utilization among vulnerable populations. The following key findings from the evaluation are related to this goal:

- Among children aged 4 to 20 years enrolled in Medicaid, the dental service utilization rate rose by 2.4 percentage points between CY 2011 and CY 2015. Children in foster care had a dental visit rate that was 4.2 percentage points higher than other children in HealthChoice.
- Between CY 2011 and CY 2015, the overall rate of ambulatory care visits for children in foster care increased by 2.1 percentage points. Nonetheless, children in foster care in CY 2015 had a lower rate of ambulatory care service utilization and a higher rate of outpatient ED visits compared to other children in HealthChoice.
- Measures of access to prenatal care services declined during the evaluation period. For example, the percentage of women who received more than 80 percent of expected prenatal visits decreased by 6.5 percentage points from 74.4 percent in CY 2011 to 67.9 percent in CY 2015. However, despite the overall decline, rates improved between CY 2014 and CY 2015. National Medicaid rates for this measure held relatively constant during the period.



- The rates of ambulatory care visits, CD4 testing, and viral load testing improved for participants with HIV/AIDS during the evaluation period. Also, the percentage of participants with an ED visit dropped by 2.7 percentage points.
- Regarding racial/ethnic disparities in access to care, Black children had lower rates of ambulatory care visits than other children. Among the entire HealthChoice population, Black participants also had the highest ED utilization rates.

ACA Medicaid Expansion Population

The HealthChoice evaluation includes a section that addresses demographic characteristics and service utilization measures among the ACA Medicaid expansion population, which consists of three different coverage groups: former PAC participants,¹ childless adults,² and parents and caretaker relatives. Related to the ACA Medicaid expansion population, the evaluation found the following:

- The majority of ACA Medicaid expansion participants with any period of enrollment were male (53.3 percent in CY 2014 and 51.7 percent in CY 2015) and resided in the Baltimore Suburban or Washington Suburban regions (54.5 percent in CY 2014 and 56.6 percent in CY 2015).
- In CY 2014, 9.4 percent of ACA Medicaid expansion participants with any period of enrollment had an inpatient visit. This rate dropped to 8.4 percent in CY 2015. Among the same group of participants, 31.4 percent had at least one ED visit in CY 2014, which decreased to 30.2 percent in CY 2015. In comparison, the rate of inpatient admissions among the overall HealthChoice population aged 19 to 64 years was 10.2 percent in CY 2015, while the rate of ED visits was 34.1 percent.

¹ The PAC program offered a limited benefit package to adults with low income, covering primary care visits, certain outpatient mental health services, and prescription drugs.

² Childless adults who were not enrolled in PAC as of December 2013.



Introduction

HealthChoice—Maryland’s statewide mandatory Medicaid managed care program—was implemented in 1997 under authority of Section 1115 of the Social Security Act. In January 2002, the Maryland Department of Health (the Department) completed the first comprehensive evaluation of HealthChoice as part of the first 1115 waiver renewal. The 2002 evaluation examined HealthChoice performance by comparing service use during the program’s initial years to utilization during the final year without managed care (fiscal year [FY] 1997). The Centers for Medicare & Medicaid Services (CMS) approved subsequent waiver renewals in 2005, 2007, 2010, 2013, and 2016.

The 2013 annual evaluation—developed as a summative review of the previous waiver period, in preparation for the 2013 waiver renewal—focused on the HealthChoice goals of expanding coverage to additional Maryland residents with low income, improving access to care, and improving service quality. Between waiver renewals, the Department continually monitors HealthChoice performance on a variety of measures and completes an annual evaluation for HealthChoice stakeholders.

This report constitutes the 2017 annual evaluation of the HealthChoice program, which includes results from calendar years (CYs) 2011 to 2015. It presents a brief overview of the HealthChoice program and recent program updates before addressing the following topics:

- Coverage and access to care
- The extent to which HealthChoice provides participants with a medical home
- The quality of care delivered to participants
- Special topics, including dental services, mental health care, substance use disorder (SUD) services, services provided to children in foster care, reproductive health services, services for individuals with HIV/AIDS, the Rare and Expensive Case Management (REM) program, and racial and ethnic disparities in utilization
- Demographics and service utilization of the Affordable Care Act (ACA) Medicaid expansion population

This report is a collaborative effort between the Department and The Hilltop Institute at the University of Maryland, Baltimore County (UMBC).

Overview of the HealthChoice Program

As of the end of CY 2015, over 83 percent of the state’s Medicaid and Maryland Children’s Health Program (MCHP) populations were enrolled in the mandatory managed care program, HealthChoice. HealthChoice participants choose one of eight managed care organizations (MCOs), as well as a primary care provider (PCP) from their MCO’s network who will oversee



their medical care. Participants who do not select an MCO or a PCP are automatically assigned to one. The groups of Medicaid-eligible individuals who enroll in HealthChoice MCOs include the following:

- Families with low incomes that have children
- Families that receive Temporary Assistance for Needy Families (TANF)
- Children younger than 19 years who are eligible for MCHP
- Children in foster care and, starting in CY 2014, individuals up to age 26 who were previously enrolled in foster care
- Adults under age 65 with incomes up to 138 percent of the federal poverty level (FPL), starting in CY 2014
- Women with incomes up to 264 percent of the FPL who are pregnant or less than 60 days postpartum
- Individuals receiving Supplemental Security Income (SSI) who are under 65 and not eligible for Medicare

Not all Maryland Medicaid beneficiaries are enrolled in HealthChoice MCOs. Groups that are not eligible for MCO enrollment include the following:

- Medicare beneficiaries
- Individuals aged 65 years and older
- Individuals in a “spend-down” eligibility group who are only eligible for Medicaid for a limited period of time
- Individuals who require more than 90 days of long-term care services and are subsequently disenrolled from HealthChoice
- Individuals who are continuously enrolled in an institution for mental illness for more than 30 days
- Individuals who reside in an intermediate care facility for intellectual disabilities
- Individuals enrolled in the Model Waiver or the Employed Individuals with Disabilities program

Additional populations covered under the HealthChoice waiver—but who are not enrolled in HealthChoice MCOs—include individuals in the Family Planning and REM programs. The Family Planning program is a limited-benefit program under the waiver, whereas HealthChoice-eligible individuals with certain diagnoses may choose to receive care on a fee-for-service (FFS) basis through the REM program. Both programs are further discussed in Section IV of this report.



HealthChoice participants receive the same comprehensive benefits as those available to Maryland Medicaid participants through the FFS system. The MCO benefit package during 2015 includes, but is not limited to, the following services:

- Inpatient and outpatient hospital care
- Physician care
- Federally qualified health center (FQHC) or other clinic services
- Laboratory and X-ray services
- Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) services for children
- Prescription drugs, with the exception of mental health and HIV/AIDS drugs
- Durable medical equipment and disposable medical supplies
- Home health care
- Vision services
- Dialysis
- The first 30 days of long-term care services³

The following services are carved out of the MCO benefit package and instead are covered by the Medicaid FFS system:

- Specialty mental health care, which is administered by the Behavioral Health Administration (BHA), which is housed under the auspices of the Department
- SUD treatment services,⁴ which are also administered by BHA
- Dental care for children, pregnant women, and adults in the REM program
- Health-related services and targeted case management services provided to children when the services are specified in the child's Individualized Education Plan or Individualized Family Service Plan
- Therapy services (occupational, physical, speech, and audiology) for children
- Personal assistance services offered under the Community First Choice program
- Viral load testing services, genotypic, phenotypic, or other HIV/AIDS drug resistance testing for the treatment of HIV/AIDS
- HIV/AIDS drugs and specialty mental health drugs

³ This was changed to the first 90 days of long-term care services in 2017.

⁴ Substance use disorder services were carved out of the MCO benefit package on January 1, 2015. Mental health services have never been included in the MCO benefit package.



- Services covered under 1915(c) home and community-based services waivers⁵

Who Is Enrolled in HealthChoice?

The total number of individuals with any period of HealthChoice enrollment increased by 46.1 percent during the evaluation period. Much of that increase is explained by the expansion of eligibility to childless adults under the ACA. At the beginning of the evaluation period, adults over the age of 18 made up 36.2 percent of HealthChoice participants. That proportion increased to over half of the population (50.7 percent) by CY 2015.

Table 1. HealthChoice Population (Any Period of Enrollment), Demographics, CY 2011 and CY 2015

| Demographic Category | CY 2011 | | CY 2015 | |
|--------------------------|-------------------|-------------|-------------------|-------------|
| | # of Participants | % of Total | # of Participants | % of Total |
| Sex | | | | |
| Female | 506,901 | 56.8% | 710,450 | 54.5% |
| Male | 385,877 | 43.2% | 594,042 | 45.5% |
| Total | 892,778 | 100% | 1,304,492 | 100% |
| Age Group (Years) | | | | |
| 0 - <1 | 35,522 | 4.0% | 36,162 | 2.8% |
| 1 - 2 | 77,877 | 8.7% | 78,735 | 6.0% |
| 3 - 5 | 111,111 | 12.4% | 111,541 | 8.6% |
| 6 - 9 | 120,470 | 13.5% | 151,067 | 11.6% |
| 10 - 14 | 130,733 | 14.6% | 154,979 | 11.9% |
| 15 - 18 | 93,906 | 10.5% | 110,152 | 8.4% |
| 19 - 20 | 40,821 | 4.6% | 46,208 | 3.5% |
| 21 - 39 | 181,279 | 20.3% | 345,813 | 26.5% |
| 40 - 64 | 101,059 | 11.3% | 269,835 | 20.7% |
| Total | 892,778 | 100% | 1,304,492 | 100% |
| Race/Ethnicity | | | | |
| Asian | 29,372 | 3.3% | 56,849 | 4.4% |
| Black | 443,970 | 49.7% | 585,844 | 44.9% |
| White | 261,284 | 29.3% | 382,278 | 29.3% |
| Hispanic | 107,173 | 12.0% | 126,207 | 9.7% |
| Other* | 50,979 | 5.7% | 153,314 | 11.8% |
| Total | 892,778 | 100% | 1,304,492 | 100% |

⁵ Services covered under the 1915(c) home- and community-based waivers include assisted living, medical day care, family training, case management, senior center plus, dietitian and nutritionist services, and behavioral consultation.



| Demographic Category | CY 2011 | | CY 2015 | |
|----------------------|-------------------|-------------|-------------------|-------------|
| | # of Participants | % of Total | # of Participants | % of Total |
| Region* | | | | |
| Baltimore City | 192,391 | 21.5% | 246,406 | 18.9% |
| Baltimore Suburban | 241,809 | 27.1% | 371,115 | 28.4% |
| Eastern Shore | 86,767 | 9.7% | 120,337 | 9.2% |
| Southern Maryland | 44,523 | 5.0% | 65,792 | 5.0% |
| Washington Suburban | 252,334 | 28.3% | 395,132 | 30.3% |
| Western Maryland | 72,789 | 8.2% | 104,029 | 8.0% |
| Out of State | 2,165 | 0.2% | 1,681 | 0.1% |
| Total | 892,778 | 100% | 1,304,492 | 100% |

*Other race/ethnicity category includes Native American, Pacific Islands/Alaskan, and unknown.

**Regions are defined as the following counties: Baltimore City (only), Baltimore Suburban (Anne Arundel, Baltimore, Carroll, Harford, and Howard), Eastern Shore (Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester), Southern Maryland (Calvert, Charles, and St. Mary's), Washington Suburban (Montgomery and Prince George's) and Western Maryland (Allegany, Frederick, Garrett, and Washington).

Program Updates

The following significant changes were made to the HealthChoice program during the evaluation period:

- Beginning in January 2012, Maryland expanded eligibility for the Family Planning program to include all women with household income up to 200 percent of the FPL. The program previously only covered women losing pregnancy-related Medicaid eligibility 60 days postpartum.
- From the inception of the HealthChoice program in 1997, mental health services have been carved out of the benefit package, while services for individuals with SUDs were included in the benefit package. In 2010, Maryland began a Behavioral Health Integration stakeholder process to streamline these disparate systems of care for individuals with co-occurring serious mental illness and substance use issues. The first phase of this process saw collaboration between the Department, a consultant, and stakeholders to assess the strengths and weaknesses of Maryland's system; the second phase involved development of a broad financing model to better integrate care. In 2013, the Department announced its decision to establish an integrated carve-out for mental health and SUD services. The Department implemented this behavioral health carve-out on January 1, 2015. An administrative services organization (ASO) was selected in September 2014 to coordinate care for both Medicaid participants and the uninsured. Since January 1, 2015, all specialty mental health and SUD services for Medicaid recipients have been administered by the ASO. These services are now reimbursed on an FFS basis by the ASO under the oversight of Medicaid and BHA.



- In 2011, Maryland began a three-year pilot program to test the use of a patient-centered medical home (PCMH), called the Maryland Multi-Payer Patient-Centered Medical Home Program (MMPP). The MMPP provided Maryland patients with many services, such as integrated care plans, chronic disease management, medication reconciliation at every visit, and same-day appointments for urgent matters. Across the state, 52 primary and multispecialty practices and FQHCs participated in the MMPP. These providers received fixed transformation payments on a per beneficiary basis and shared savings through HealthChoice MCOs and private insurance carriers.⁶
- CMS awarded Maryland performance bonuses for its work to identify and enroll eligible children in Medicaid and MCHP. These bonuses were given under the Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA), which provided performance bonuses to states that met two sets of criteria: 1) states must implement at least five of eight Medicaid and CHIP program features known to improve health coverage programs for children, and 2) states must increase Medicaid enrollment among children above a baseline level for the fiscal year. The performance bonuses were distributed annually in FY 2009 through FY 2013. CMS awarded Maryland \$11.4 million for FY 2010 performance, \$28.0 million for FY 2011 performance, \$37.5 million for FY 2012 performance, and \$43.5 million for FY 2013 performance (MACPAC, 2014).
- In FY 2013, the Maryland General Assembly set aside funds for the development of a chronic health home demonstration. Section 2703 of the Affordable Care Act (ACA) allows states to amend their Medicaid state plans to offer health homes that provide comprehensive systems of care coordination for participants with two or more defined chronic conditions. Maryland’s chronic health home program serves individuals diagnosed with a serious and persistent mental illness, children diagnosed with a serious emotional disturbance, and individuals diagnosed with an opioid SUD who are at risk for another chronic condition based on tobacco, alcohol, or other non-opioid substance use. As of August 2016, the Department had approved 81 Health Home site applications, with over 5,300 enrolled participants. The Health Home sites include 63 psychiatric rehabilitation programs, 10 mobile treatment providers, and 8 opioid treatment programs.
- Under the ACA, Maryland expanded coverage through the Medicaid program to the following new populations:
 - Individuals with incomes up to 138 percent of the FPL; over the course of the expansion’s first year (CY 2014), 283,716 adults received Medicaid coverage through this expansion. This included more than 90,000 former Primary Adult Care (PAC) participants who were automatically transferred into expansion coverage. As of December 2015, there were 244,891 individuals enrolled in Medicaid as a result of the ACA expansion.

⁶ Medicaid payments continued thru June 2016, corresponding with the end of the fiscal year.



- Former foster children up to the age of 26 years.
- There were several MCO participation changes. One MCO, Coventry (also known as Diamond Plan), withdrew from the program in 2013. Two new MCOs, Riverside Health of Maryland (now known as the University of Maryland Health Partners) and Kaiser Permanente of the Mid-Atlantic States, joined the program in February 2013 and June 2014, respectively.

The Department looks forward to including the results of several new initiatives going forward. The following programs were approved for the CY 2017 – CY 2021 waiver period.

- Effective January 1, 2017, Maryland began to provide dental benefits for former foster youth between the ages of 21 and 26 years.
- Effective July 1, 2017, Maryland implemented a Residential Treatment for Individuals with Substance Use Disorder Program for individuals aged 21 through 64 years, as part of a comprehensive SUD strategy. This program extended the benefits package to include SUD treatment in certain Institutions for Mental Disease; this benefit is delivered by an ASO through the integrated behavioral health FFS delivery system. The coverage of residential treatment and withdrawal management services expanded Maryland’s current SUD benefit package to cover the full continuum of care for SUD treatment.
- Maryland is administering the following two community health pilot programs effective July 1, 2017:
 - Evidence-Based Home Visiting Service Pilot Program: This program will provide evidence-based home visiting services by licensed practitioners to promote enhanced health outcomes, whole person care, and community-integration for high-risk pregnant women and children up to two years old.
 - Assistance in Community Integration Services Pilot Program: This program will provide home and community-based services for 300 individuals annually, including community transition services for individuals moving from institutional to community settings and for those at imminent risk of institutional placement. In addition, individuals can receive home and community-based services that could be provided to the individual under a 1915(c) waiver or 1915(i) state plan amendment.



Section I. Coverage and Access

Two of the goals of the HealthChoice program are to expand coverage to additional residents with low income through resources generated from managed care efficiencies and to improve access to health care services for the Medicaid/MCHP population. This section of the report addresses Maryland's progress toward achieving these coverage and access goals. Coverage is examined through several enrollment measures. Access to care is measured by ambulatory care service utilization, emergency department (ED) service utilization, inpatient care utilization, provider network adequacy, and enrollee satisfaction survey results.

Are More Marylanders Covered?

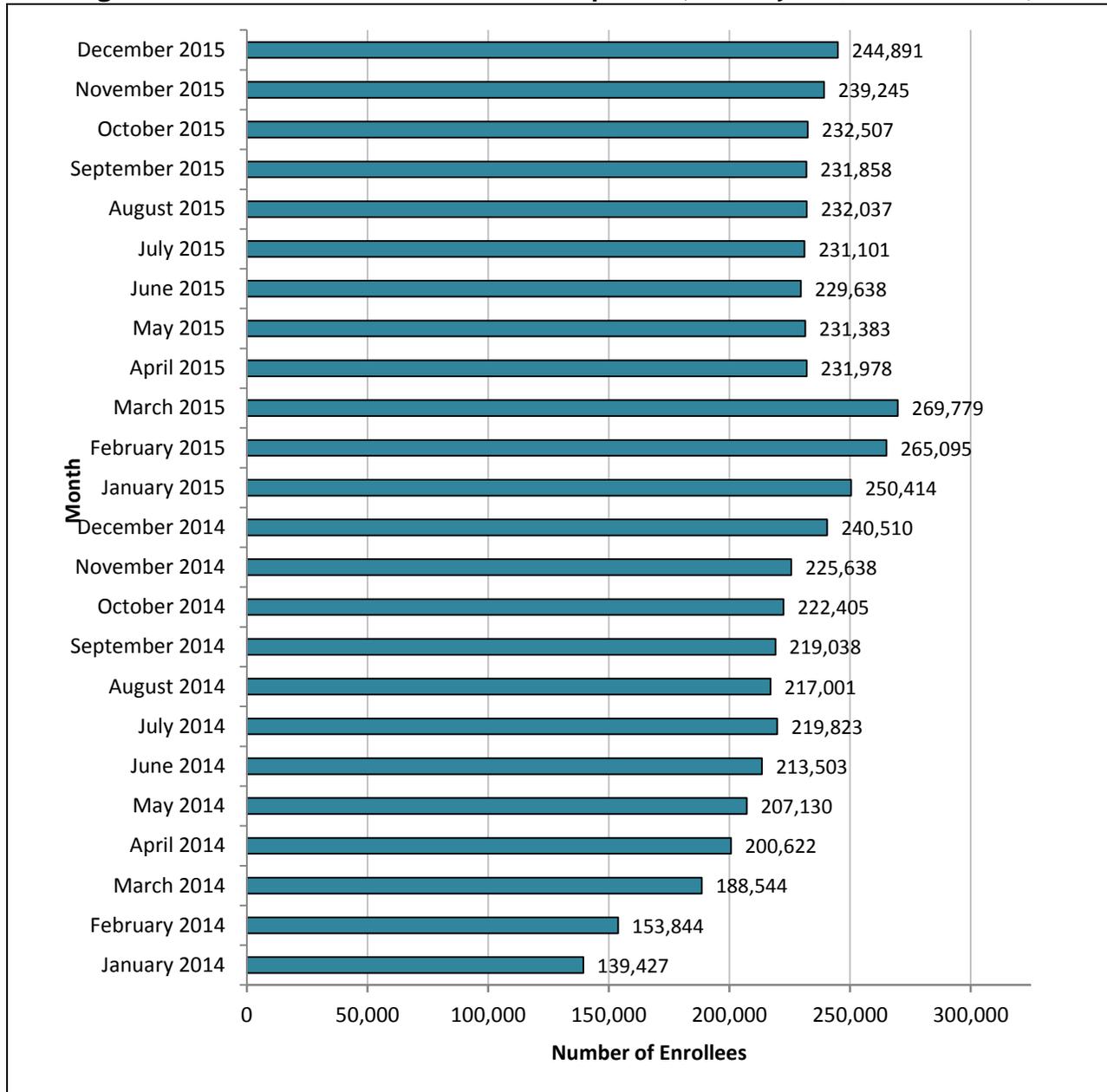
Major Expansion Initiatives

Maryland has recently engaged in several efforts to increase Medicaid enrollment. Legislation and grant awards have increased the Department's capacity to enroll uninsured children and adults in programs for which they might be eligible. One of the most impactful of these expansion efforts was the increase in income eligibility for families in Medicaid. Effective July 1, 2008, Maryland expanded the eligibility thresholds for parents and caretaker relatives of children enrolled in Medicaid or MCHP from approximately 40 percent of the FPL to 116 percent of the FPL.

Beginning in January 2014, under the ACA, Maryland expanded Medicaid eligibility to individuals up to age 26 who were formerly enrolled in foster care. States also had the option to expand their Medicaid eligibility to all adults under 65 years of age with incomes up to 138 percent of the FPL. Maryland elected to expand its Medicaid eligibility. As a result, eligibility for parents was again expanded from 116 percent to 138 percent of the FPL. Enrollees in the PAC program also transitioned into a categorically eligible Medicaid population on January 1, 2014. Figure 1 presents the monthly enrollment in the ACA Medicaid expansion population from January 2014 to December 2015. Enrollment increased from 139,427 participants in January 2014 to 244,891 participants in December 2015. Enrollment reached a peak of 269,779 participants in March 2015. Of the expansion population with 12 months of enrollment in CY 2015, 37.3 percent were aged 19 to 34 years, 27.4 percent were aged 35 to 49 years, and 35.3 percent were aged 50 to 64 years.



Figure 1. Enrollment in the ACA Medicaid Expansion, January 2014–December 2015



*Enrollment counts in Figure 1 include enrollees of all ages and enrollees who have not yet been matched with an MCO.



HealthChoice Enrollment

HealthChoice enrollment can be measured using several different methods. One method of measurement is to count the number of individuals with any period of enrollment during a given calendar year, including individuals who may not have been enrolled for the entire year. Another method is to count individuals who were enrolled at a certain point in time (e.g., enrollment as of December 31). Although this yields a smaller number, it provides a snapshot of typical program enrollment on a given day. Unless otherwise specified, the enrollment data in this section of the report use the point-in-time methodology to reflect enrollment as of December 31 of the measurement year.⁷

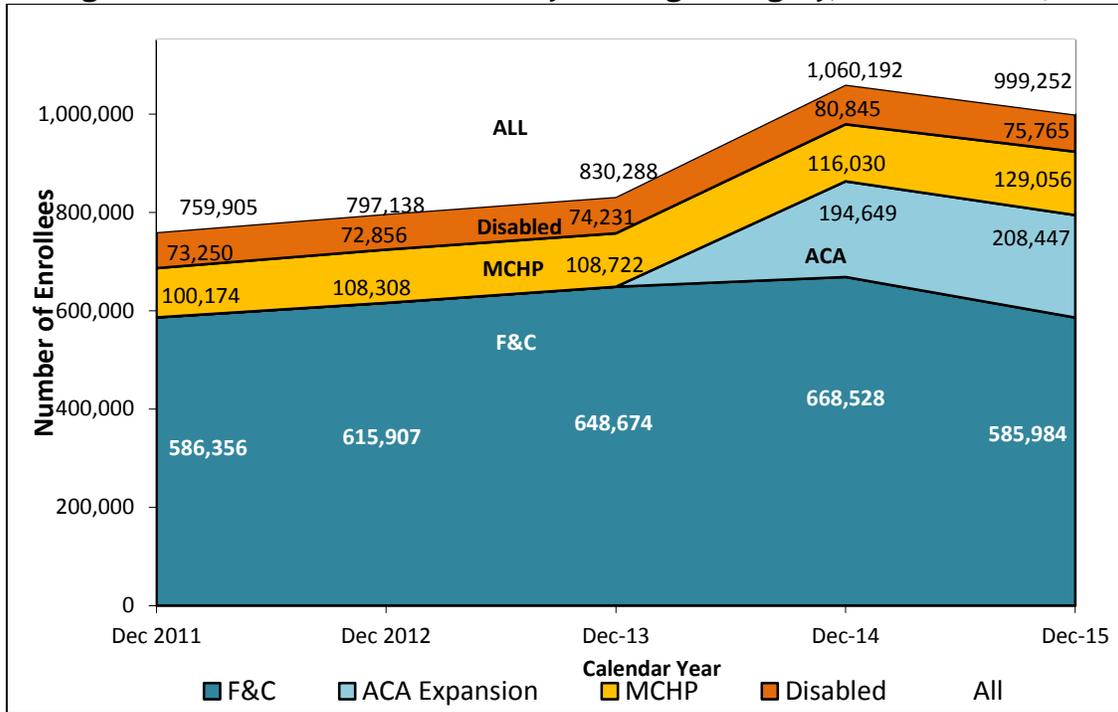
Figure 2 displays HealthChoice enrollment by coverage category between CY 2011 and CY 2015. The overall HealthChoice population grew by 31.5 percent between CY 2011 and CY 2015, and the largest enrollment increase occurred in CY 2014 as a result of the ACA Medicaid expansion. However, the population decreased by 5.7 percent between CY 2014 and CY 2015 due to the reinstatement of eligibility redeterminations, which had been temporarily suspended. As of December 31 of each year, most HealthChoice enrollees were eligible in the families, children, and pregnant women (F&C) category. The coverage category for individuals with disabilities was the smallest eligibility category in each study year.⁸

⁷ Enrollment data are presented for individuals aged 0 through 64 years. Age is calculated as of December 31 of the measurement year.

⁸ Data for each year were updated to reflect a change in how coverage groups were categorized and to add a category for participants enrolled in ACA expansion coverage groups. See Appendix A for an explanation of which Medicaid coverage groups are included in each coverage category.



Figure 2. HealthChoice Enrollment by Coverage Category, CY 2011–CY 2015*



*Enrollment counts in Figure 2 include participants aged 0-64 years who are enrolled in a HealthChoice MCO.

Enrollment Growth

As of January 2016, national enrollment in Medicaid and CHIP reached 72.9 million; between the summer of 2013 and January 2016, Maryland experienced the 14th highest growth rate in Medicaid and CHIP enrollment out of the 48 states and the District of Columbia reporting data (Gates, Rudowitz, Artiga, & Snyder, 2016). The uninsured rate in Maryland fell from 11 percent in CY 2013 to 7 percent in CY 2015 (The Kaiser Family Foundation State Health Facts, n.d.).

Table 2 shows the percentage of Maryland’s population enrolled in HealthChoice between CY 2011 and CY 2015. These data are presented for individuals enrolled in HealthChoice as of December 31 and for individuals with any period of HealthChoice enrollment. The percentage of the Maryland population with any period of HealthChoice enrollment increased from 15.3 percent in CY 2011 to 21.8 percent in CY 2015, with the most dramatic increase from CY 2013 to CY 2014 due to the ACA Medicaid expansion. Most new Maryland Medicaid participants are enrolled in managed care.



Table 2. HealthChoice Enrollment as a Percentage of the Maryland Population, CY 2011–CY 2015

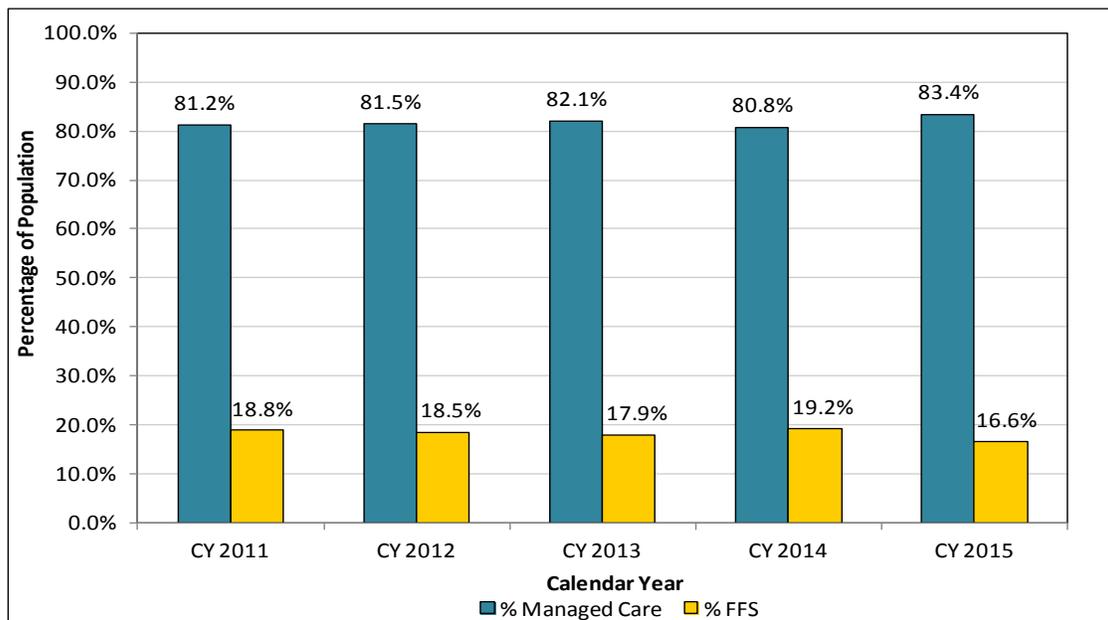
| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|--|-----------|-----------|-----------|-----------|-----------|
| Maryland Population* | 5,843,603 | 5,889,651 | 5,931,129 | 5,967,295 | 5,994,983 |
| Individuals Enrolled in HealthChoice for Any Period of Time During the Year | | | | | |
| HealthChoice Population | 893,084 | 930,647 | 961,597 | 1,251,023 | 1,304,492 |
| % of Population in HealthChoice | 15.3% | 15.8% | 16.2% | 21.0% | 21.8% |
| Individuals Enrolled in HealthChoice as of December 31 | | | | | |
| HealthChoice Population | 759,905 | 797,138 | 830,288 | 1,060,192 | 999,252 |
| % of Population in HealthChoice | 13.0% | 13.5% | 14.0% | 17.8% | 16.7% |

*Data source: U.S. Census Bureau, Population Division. Annual Estimates of the Resident Population: April 1, 2010, to July 1, 2016. Retrieved from <https://factfinder.census.gov/bkmk/table/1.0/en/PEP/2016/PEPANRES>

Are More Maryland Medicaid/MCHP Participants Covered under Managed Care?

One of the original goals of the HealthChoice program was to enroll more Medicaid and MCHP participants into managed care. Figure 3 presents the percentage of Maryland Medicaid/MCHP participants who were enrolled in managed care (including both HealthChoice and PAC MCOs until 2014 when the PAC program ended) compared to FFS enrollment. Between CY 2011 and CY 2015, managed care enrollment remained consistently above 80 percent.

Figure 3. Percentage of Medicaid/MCHP Participants in Managed Care versus FFS, CY 2011–CY 2015



Does the Covered Population Access Care?

With the continued increase in HealthChoice enrollment, it is important to maintain access to care. This section of the report examines service use related to ambulatory care, ED visits, and inpatient admissions covered by HealthChoice MCOs and the FFS system. In addition, it analyzes network adequacy to evaluate access to care. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) program, which is a part of the U.S. Agency for Healthcare Research and Quality (AHRQ), offers a CAHPS Health Plan Survey for Medicaid participants. This section also discusses results from that survey. Unless otherwise stated, all measures in this section are calculated for HealthChoice participants with any period of enrollment in HealthChoice during the calendar year.

Ambulatory Care Visits

The Department monitors ambulatory care utilization as a measure of access to care. An ambulatory care visit is defined as contact with a doctor or nurse practitioner in a clinic, physician's office, or hospital outpatient department by an individual enrolled in HealthChoice at any time during the measurement year; this definition excludes ED visits, hospital inpatient services, home health, X-rays, and laboratory services. This measure also includes ambulatory care visits related to mental health disorders (MHDs) and SUDs.⁹ When properly accessing care, HealthChoice participants should receive care in an ambulatory care setting rather than using the ED for a non-emergent condition or allowing a condition to exacerbate to the extent that it requires an inpatient admission. In this section of the report, ambulatory care visits are measured using MCO encounter and FFS claims data. See Appendix B for ambulatory care visit rates measured using MCO encounter data only.

Figure 4 presents the percentage of HealthChoice participants who received an ambulatory care visit during the calendar year by age group. Between CY 2011 and CY 2013, the ambulatory care visit rate increased from 78.4 percent to 79.3 percent. However, between CY 2013 and CY 2015, the rate decreased to 76.1 percent. This decrease may be attributed to ACA expansion HealthChoice participants who utilized ambulatory care services at a lower rate. However, ambulatory care utilization rates increased for some age groups during the evaluation period. The largest increase was among children aged 10 to 18 years.

⁹ See page 294 of HEDIS 2015 Technical Specifications for Health Plans for a list of diagnosis and procedure codes for both mental health and substance use.



Figure 4. Percentage of the HealthChoice Population who Received an Ambulatory Care Visit by Age Group, CY 2011–CY 2015

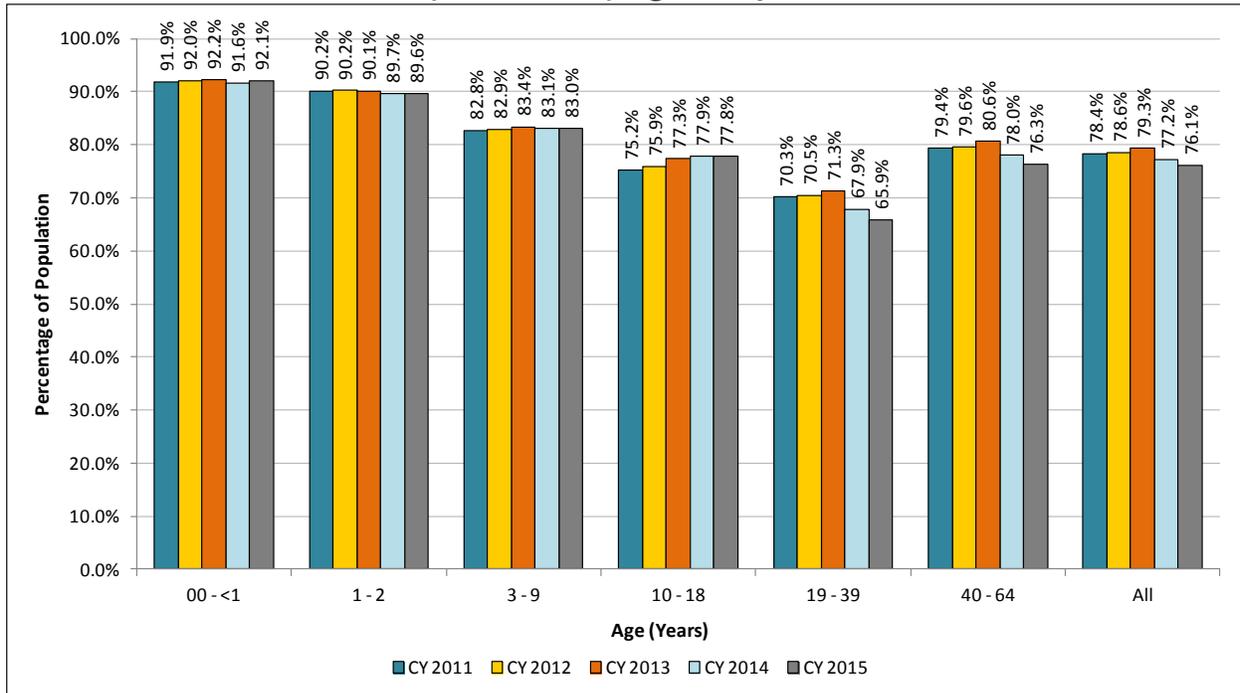


Figure 5 presents the percentage of the HealthChoice population who received an ambulatory care visit by region between CY 2011 and CY 2015. HealthChoice participants on the Eastern Shore and in Western Maryland continued to have the highest rates of ambulatory care visits across the state. These data demonstrate that HealthChoice participants' utilization of ambulatory care is equal across all regions.



Figure 5. Percentage of the HealthChoice Population who Received an Ambulatory Care Visit by Region, CY 2011–CY 2015

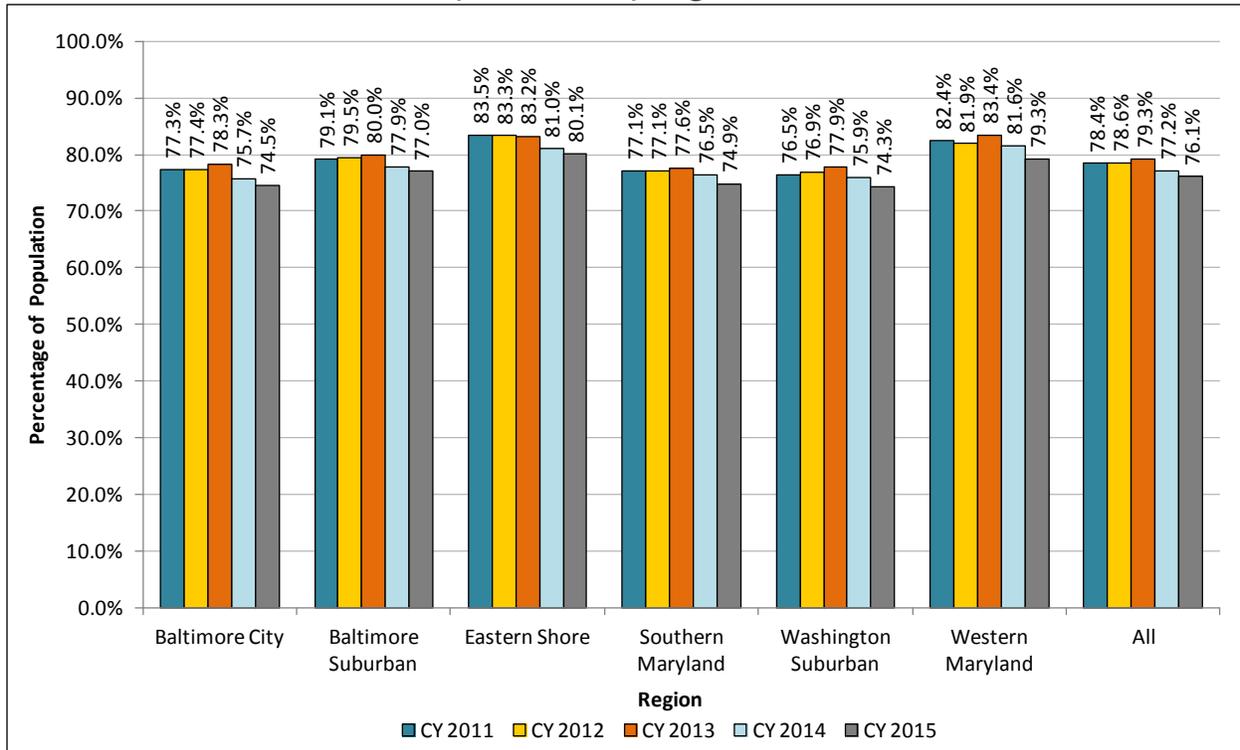
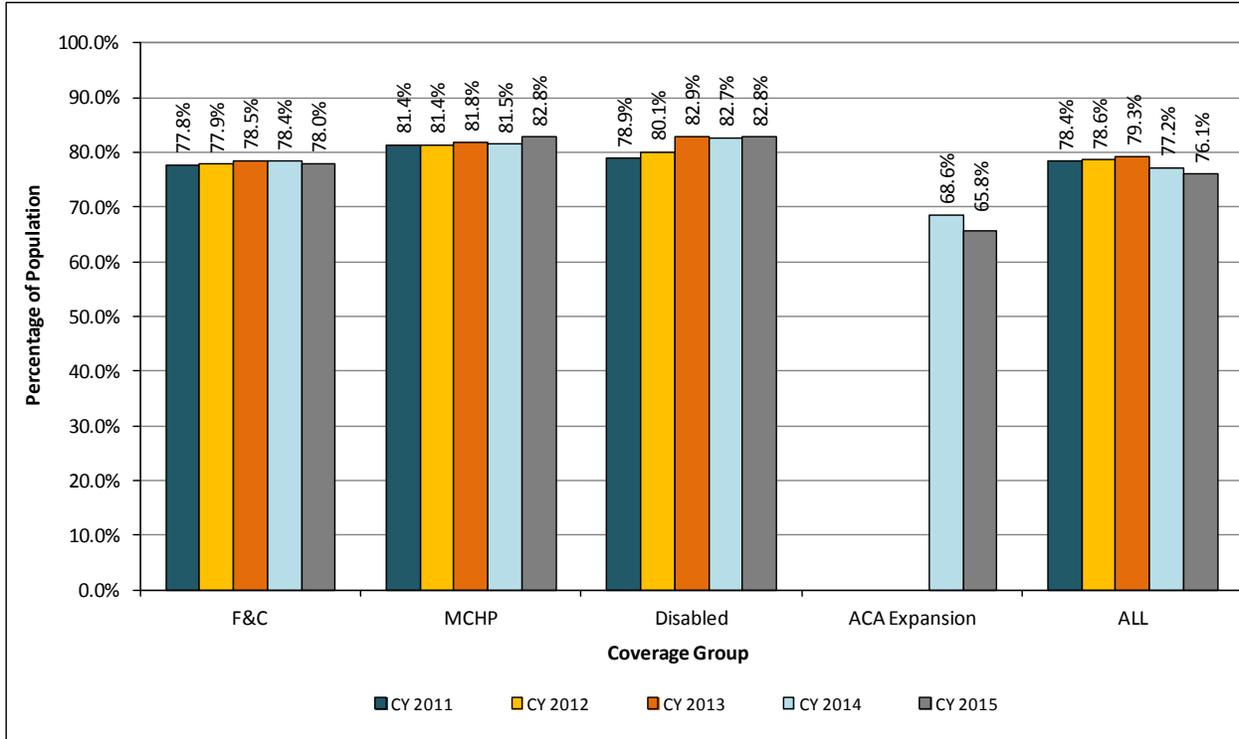


Figure 6 presents ambulatory care use by coverage category. As noted above, there was a decline in ambulatory care utilization across the measurement period among the entire HealthChoice population. The decrease in utilization in CY 2014 and CY 2015 was likely due to the addition of participants in the ACA expansion group; these individuals accessed ambulatory care services at a lower rate than participants in other coverage groups. In contrast, ambulatory care utilization increased for participants in the three other coverage groups over the course of the evaluation period.¹⁰

¹⁰ Data for each year were updated to reflect a change in how coverage groups were categorized and to add a category for participants enrolled in ACA expansion coverage groups. See Appendix A for an explanation of which Medicaid coverage groups are included in each coverage category.



Figure 6. Percentage of the HealthChoice Population who Received an Ambulatory Care Visit by Coverage Category, CY 2011–CY 2015



ED Utilization

As noted earlier, ED visits should not occur for conditions that can be treated in an ambulatory care setting. HealthChoice was expected to lower ED use based on the premise that a managed care system is capable of promoting ambulatory and preventive care, thereby reducing the need for emergency services. To assess overall ED utilization, the Department measures the percentage of individuals with any period of enrollment who visited an ED at least once during the calendar year. This measure includes ED visits covered by HealthChoice MCOs and the FFS system, and the measure excludes ED visits that resulted in an inpatient hospital admission. See Appendix C for MCO-only ED visit rates.

Figure 7 presents ED use by coverage category. Overall, the ED visit rate among HealthChoice participants remained stable between CY 2011 and CY 2013 but dropped 2.8 percentage points between CY 2013 (33.2 percent) and CY 2015 (30.4 percent). Among the coverage categories,



participants with disabilities were the most likely to utilize ED services throughout the evaluation period.¹¹

Figure 7. Percentage of the HealthChoice Population who Received an ED Visit by Coverage Category, CY 2011–CY 2015

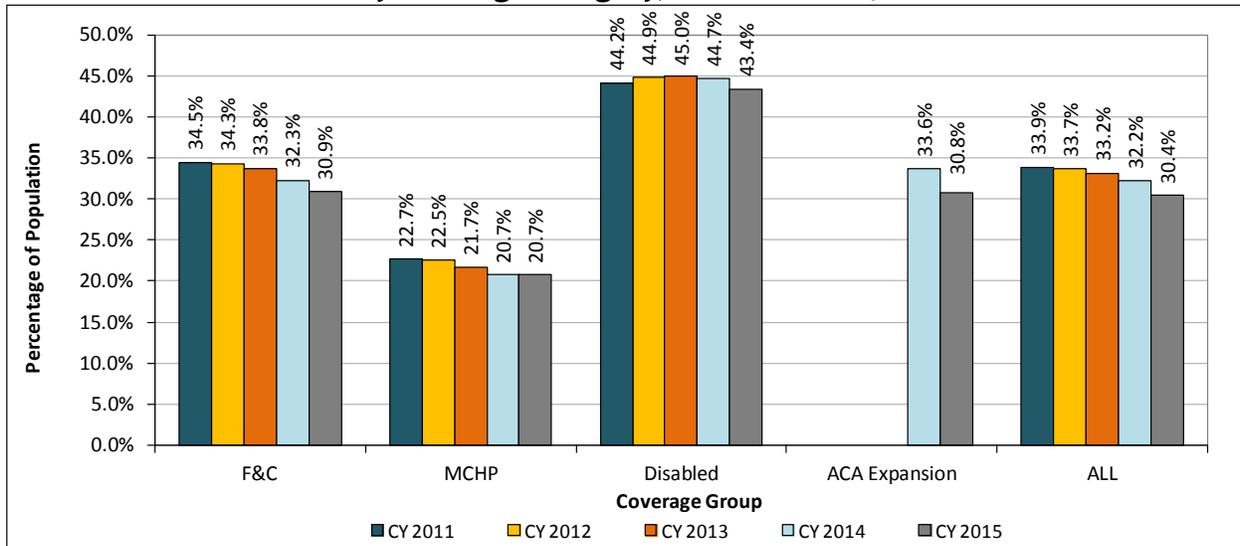
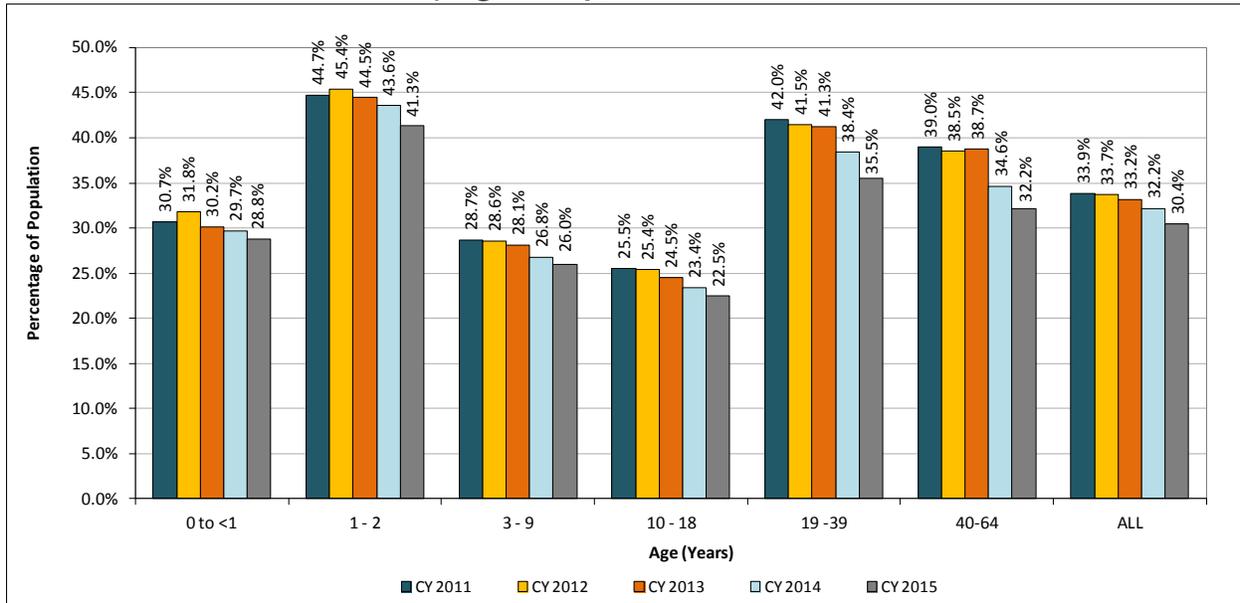


Figure 8 shows ED utilization by age group from CY 2011 through CY 2015. Children aged 1 and 2 years had the highest ED use across the evaluation period (41.3 percent in CY 2015), followed by adults aged 19 to 39 years (35.5 percent in CY 2015). Between CY 2011 and CY 2015, the ED visit rate for adults aged 19 to 39 years and 40 to 64 years declined by 6.5 and 6.8 percentage points, respectively. These drops could be explained by the addition of new participants who joined HealthChoice through the ACA expansion and who use the ED at a lower rate.

¹¹ Data for each year were updated to reflect a change in how coverage groups were categorized and to add a category for participants enrolled in ACA expansion coverage groups. See Appendix A for an explanation of which Medicaid coverage groups are included in each coverage category.



Figure 8. Percentage of the HealthChoice Population who Received an ED Visit by Age Group, CY 2011–CY 2015



Inpatient Admissions

To assess inpatient utilization, the Department measures the percentage of participants aged 18 to 64 years with any period of HealthChoice enrollment who had an inpatient admission during the calendar year. Inpatient admissions include all institutional services reported by Maryland hospitals as inpatient. This measure includes visits covered under the FFS and MCO systems. See Appendix D for inpatient admission rates measured using MCO encounter data only.

Table 3 presents the percentage of HealthChoice participants with at least one inpatient hospital admission. Overall, the rate of adult HealthChoice participants with at least one inpatient admission decreased by 5.3 percentage points, from 15.5 percent in CY 2011 to 10.2 percent in CY 2015. Changes in the composition of participants through the ACA expansion is likely to have contributed to the decrease in the percentage of participants with an inpatient admission.

Table 3. Percentage of HealthChoice Participants Aged 18–64 Years who Received an Inpatient Admission, CY 2011–CY 2015

| Year | Number of Participants | Number with at Least One Inpatient Admission | Percentage of Total |
|---------|------------------------|--|---------------------|
| CY 2011 | 346,888 | 53,868 | 15.5% |
| CY 2012 | 364,528 | 52,294 | 14.3% |
| CY 2013 | 379,149 | 51,700 | 13.6% |
| CY 2014 | 636,719 | 72,302 | 11.4% |



| Year | Number of Participants | Number with at Least One Inpatient Admission | Percentage of Total |
|---------|------------------------|--|---------------------|
| CY 2015 | 687,777 | 69,991 | 10.2% |

Are Provider Networks Adequate to Ensure Access?

Another method of measuring enrollee access to care is to examine provider network adequacy. This section of the report examines PCP and specialty provider networks.

PCP Network Adequacy

HealthChoice requires every participant to have a PCP, and each MCO must have enough PCPs to serve its enrollee population. HealthChoice regulations require a ratio of 1 PCP to every 200 participants within each of the 40 local access areas (LAAs) in the state.¹² Because some PCPs traditionally serve a high volume of HealthChoice participants at some of their sites (e.g., FQHC physicians), the regulations permit the Department to approve a ratio of 2,000 adult participants per high-volume provider and 1,500 participants aged 0 to 21 years per high-volume provider. The Department assesses network adequacy periodically throughout the year to identify potential network inadequacies and works with the MCOs to resolve capacity issues. In the case of any such issues, the Department discontinues new enrollment for that MCO in the affected region until it increases provider contracts to an adequate level.

Table 4 shows PCP network adequacy as of December 2015. The analysis counts the number of PCP offices in each county in Maryland. If a provider has more than one office location in a county, only one office was counted. If a provider has multiple office locations among different counties, one office is counted in each county. PCPs in Washington, D.C. are not included in the analysis. Two capacity estimates are presented: 200 participants per PCP office and 500 participants per PCP office. Although regulatory requirements apply to a single MCO, this analysis aggregates data from all eight HealthChoice MCOs. The analysis does not allow a single provider office that contracts with multiple MCOs to be counted multiple times; thus, it applies a higher standard than that in regulation.

Based on a standard enrollee-to-PCP ratio of 500:1, provider networks in all counties are more than adequate. Five counties—Allegany, Caroline, Dorchester, Prince George’s, and Wicomico—do not meet the more rigorous 200:1 ratio. Part of the discrepancy regarding Prince George’s County may be due to many HealthChoice enrollees residing in that jurisdiction receiving care from PCPs located in Washington, D.C. This is an improvement over CY 2014, when 7 counties failed to meet the 200:1 ratio.

¹² COMAR 10.09.66.05B.



Table 4. PCP Capacity by County, CY 2015

| County | Number of PCP Offices | Participant Capacity at 200:1 Ratio | Participant Capacity at 500:1 Ratio | Total Dec 2015 Enrollment | Excess Capacity | |
|----------------------|-----------------------|-------------------------------------|-------------------------------------|---------------------------|------------------------|------------------------|
| | | | | | Difference 200:1 Ratio | Difference 500:1 Ratio |
| Allegany | 77 | 15,400 | 38,500 | 15,622 | -222 | 22,878 |
| Anne Arundel | 720 | 144,000 | 360,000 | 65,413 | 78,587 | 294,587 |
| Baltimore City | 1,820 | 364,000 | 910,000 | 192,408 | 171,592 | 717,592 |
| Baltimore County | 1,256 | 251,200 | 628,000 | 138,358 | 112,842 | 489,642 |
| Calvert | 128 | 25,600 | 64,000 | 10,603 | 14,997 | 53,397 |
| Caroline | 40 | 8,000 | 20,000 | 8,741 | -741 | 11,259 |
| Carroll | 164 | 32,800 | 82,000 | 16,675 | 16,125 | 65,325 |
| Cecil | 102 | 20,400 | 51,000 | 20,257 | 143 | 30,743 |
| Charles | 177 | 35,400 | 88,500 | 22,318 | 13,082 | 66,182 |
| Dorchester | 35 | 7,000 | 17,500 | 9,415 | -2,415 | 8,085 |
| Frederick | 198 | 39,600 | 99,000 | 28,980 | 10,620 | 70,020 |
| Garrett | 34 | 6,800 | 17,000 | 6,409 | 391 | 10,591 |
| Harford | 234 | 46,800 | 117,000 | 31,669 | 15,131 | 85,331 |
| Howard | 338 | 67,600 | 169,000 | 30,681 | 36,919 | 138,319 |
| Kent | 25 | 5,000 | 12,500 | 3,759 | 1,241 | 8,741 |
| Montgomery | 947 | 189,400 | 473,500 | 130,197 | 59,203 | 343,303 |
| Prince George's | 778 | 155,600 | 389,000 | 165,015 | -9,415 | 223,985 |
| Queen Anne's | 64 | 12,800 | 32,000 | 6,650 | 6,150 | 25,350 |
| Somerset | 35 | 7,000 | 17,500 | 6,429 | 571 | 11,071 |
| St. Mary's | 147 | 29,400 | 73,500 | 16,799 | 12,601 | 56,701 |
| Talbot | 101 | 20,200 | 50,500 | 6,068 | 14,132 | 44,432 |
| Washington | 175 | 35,000 | 87,500 | 31,101 | 3,899 | 56,399 |
| Wicomico | 110 | 22,000 | 55,000 | 24,697 | -2,697 | 30,303 |
| Worcester | 72 | 14,400 | 36,000 | 10,044 | 4,356 | 25,956 |
| Total (in MD) | 7,777 | 1,555,400 | 3,888,500 | 998,308 | 557,092 | 2,890,192 |
| Other | 184 | | | | | |
| Washington, D.C. | 433 | | | | | |



Specialty Care Provider Network Adequacy

In addition to ensuring PCP network adequacy, the Department requires MCOs to provide all medically necessary specialty care. If an MCO does not have the appropriate in-network specialist needed to meet an enrollee's medical needs, then the MCO must arrange for care with an out-of-network specialist and compensate the provider. Regulations for specialty care access require each MCO to have an in-network contract with at least one provider statewide in 14 major medical specialties.¹³ These medical specialties include allergy, cardiology, dermatology, endocrinology, otolaryngology (ENT), gastroenterology, infectious disease, nephrology, neurology, ophthalmology, orthopedics, pulmonology, surgery, and urology. Additionally, for each of the 10 specialty care regions throughout the state in which an MCO serves, an MCO must include at least one in-network specialist in each of the eight core specialties: cardiology, otolaryngology (ENT), gastroenterology, neurology, ophthalmology, orthopedics, surgery, and urology.

CAHPS Survey Results

The Department adopted the CAHPS survey to measure enrollees' satisfaction with their medical care (WBA Research, 2016; WB&A Market Research, 2013). Two CAHPS survey measures related to access to care include "getting needed care" and "getting care quickly."

The following are "getting needed care" measures:

- How often it was easy for participants to get care from specialists in the last six months
- How often it was easy for participants to get care, tests, or treatment through their health plans

The following are "getting care quickly" measures:

- How often the participants received care as soon as possible when they needed care right away
- Not counting the times participants needed care right away, how often they received an appointment for health care at a doctor's office or clinic as soon as they thought they needed it

The possible survey responses for these two measures are "never," "sometimes," "usually," or "always." HealthChoice enrollees' responses are compared with benchmarks from Quality Compass, a national database developed by the National Committee for Quality Assurance (NCQA). The Quality Compass benchmarks provide national ratings from other Medicaid managed care plans across the country.

¹³ COMAR 10.09.66.05-1.



In CY 2015, 81 percent of adult HealthChoice members responded that they were “usually” or “always” successful in getting needed care, and 81 percent of adult members responded that they were “usually” or “always” successful in getting care quickly (Table 5). CY 2015 was the only year in the evaluation period when the percentages of HealthChoice members who reported getting needed care and getting care quickly were greater than the NCQA Quality Compass benchmarks, though only by 1 percentage point for both measures.

Table 5. Percentage of Adult HealthChoice Participants Responding “Usually” or “Always” to Getting Needed Care and Getting Care Quickly Compared with the NCQA Benchmark, CY 2011–CY 2015

| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|--|---------|---------|---------|---------|---------|
| Getting Needed Care - Percentage of participants who responded “Usually” or “Always” | | | | | |
| HealthChoice | 71% | 79% | 80% | 80% | 81% |
| NCQA Quality Compass Benchmark | 76% | 81% | 80% | 81% | 80% |
| Getting Care Quickly - Percentage of participants who responded “Usually” or “Always” | | | | | |
| HealthChoice | 79% | 80% | 79% | 78% | 81% |
| NCQA Quality Compass Benchmark | 80% | 81% | 81% | 81% | 80% |

In CY 2015, 83 percent of parents and guardians of children enrolled in HealthChoice responded that they were “usually” or “always” successful in getting needed care for their children, and 90 percent responded “usually” or “always” to getting care quickly (Table 6). The CY 2015 rate for getting needed care is 1 percentage point lower than the NCQA benchmark, while the rate for getting care quickly is 1 percentage point higher than the NCQA benchmark.

Table 6. Percentage of Parents and Guardians of Child HealthChoice Participants Responding “Usually” or “Always” to Getting Needed Care and Getting Care Quickly Compared with the NCQA Benchmark, CY 2011–CY 2015

| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---|---------|---------|---------|---------|---------|
| Getting Needed Care - Percentage of members who responded “Usually” or “Always” | | | | | |
| HealthChoice | 79% | 82% | 84% | 83% | 83% |
| NCQA Quality Compass Benchmark | 79% | 84% | 85% | 84% | 84% |
| Getting Care Quickly - Percentage of members who responded “Usually” or “Always” | | | | | |
| HealthChoice | 87% | 91% | 90% | 88% | 90% |
| NCQA Quality Compass Benchmark | 87% | 89% | 89% | 89% | 89% |

Parents and guardians of children with chronic conditions in HealthChoice were also surveyed (Table 7). In CY 2015, 85 percent responded “usually” or “always” to getting needed care for their children, 1 percentage point lower than the NCQA benchmark. The CY 2015 rate for “usually” or “always” getting care quickly was 92 percent, meeting the NCQA benchmark.



Table 7. Percentage of Parents and Guardians of Children with Chronic Conditions in HealthChoice Responding “Usually” or “Always” to Getting Needed Care and Getting Care Quickly Compared with the NCQA Benchmark, CY 2011–CY 2015

| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---|---------|---------|---------|---------|---------|
| Getting Needed Care - Percentage of members who responded “Usually” or “Always” | | | | | |
| HealthChoice | 80% | 84% | 85% | 86% | 85% |
| NCQA Quality Compass Benchmark | 81% | 86% | 87% | 86% | 86% |
| Getting Care Quickly - Percentage of members who responded “Usually” or “Always” | | | | | |
| HealthChoice | 90% | 93% | 92% | 92% | 92% |
| NCQA Quality Compass Benchmark | 90% | 92% | 93% | 91% | 92% |

Section I Summary

Section I of this report described the HealthChoice program’s progress in achieving its goals of expanding coverage and improving access to care. Under the ACA, Maryland expanded Medicaid eligibility to adults under the age of 65 with incomes up to 138 percent of the FPL. Enrollment in Medicaid expansion coverage groups increased from 139,427 participants in January 2014 to 244,891 participants in December 2015. The overall HealthChoice population grew by 31.5 percent between CY 2011 and CY 2015. In CY 2015, 21.8 percent of Maryland’s population had a period of enrollment in HealthChoice.

With expansion activities and increased enrollment, it is important to maintain access to care and ensure program capacity to serve a growing population. Regarding PCP networks in CY 2015, five Maryland counties—one in Western Maryland, one in the Washington Suburban region, and three on the Eastern Shore—did not meet the 200:1 enrollee-to-PCP ratio for network adequacy standards. Network adequacy in two counties—Cecil and Garrett—improved from CY 2014 and met the 200:1 enrollee-to-PCP ratio standards.

Looking at service utilization as a measure of access, the percentage of participants receiving an ambulatory care visit increased between CY 2011 and CY 2013 but dropped to 76.1 percent by CY 2015. From CY 2011 to CY 2015, the ED visit rate dropped 3.5 percentage points to 30.4 percent. New HealthChoice participants who enrolled through the ACA Medicaid expansion had lower utilization rates than other enrollees, resulting in overall declines in ambulatory care and ED utilization rates between CY 2013 and CY 2015. The percentage of adult HealthChoice participants with an inpatient admission decreased by 5.3 percentage points during the evaluation period.

Regarding enrollee satisfaction, CAHPS survey results indicate that most participants report that they usually or always receive needed care and receive care quickly. In CY 2015, the percentage of adult HealthChoice members who reported getting needed care and getting care quickly exceeded the NCQA Quality Compass national benchmarks for the first time in the measurement period.



Section II. Medical Home

Another goal of the HealthChoice program is to ensure patient-focused, comprehensive, and coordinated care by providing each member with a medical home. HealthChoice participants choose an MCO and a PCP from their MCO's network to oversee their medical care and provide a medical home. This section of the report discusses the extent to which HealthChoice provides participants with a medical home by assessing appropriate service utilization.

Appropriate Service Utilization

This section addresses whether participants could connect with their medical homes and understand how to navigate them. With a greater understanding of the resources available to them, participants should be able to seek care in an ambulatory care setting before resorting to seeking care in the ED or allowing a condition to progress to the extent that it warrants an inpatient admission.

Appropriateness of ED Care

A fundamental goal of managed care programs such as HealthChoice is the delivery of the right care at the right time in the right setting. One widely used methodology to evaluate progress toward this goal with regard to appropriate ED utilization is based on classifications developed by researchers at the New York University (NYU) Center for Health and Public Service Research (Billings, Parikh, & Mijanovich, 2000). According to Billings et al. (2000), the ED use profiling algorithm categorizes emergency visits as follows:

1. *Non-emergent*: Immediate care was not required within 12 hours based on the patient's presenting symptoms, medical history, and vital signs.
2. *Emergent but primary care treatable*: Treatment was required within 12 hours, but it could have been provided effectively in a primary care setting (e.g., CAT scan or certain lab tests).
3. *Emergent but preventable/avoidable*: Emergency care was required, but the condition was potentially preventable/avoidable if timely and effective ambulatory care had been received during the episode of illness (e.g., asthma flare-up).
4. *Emergent, ED care needed, not preventable/avoidable*: Ambulatory care could not have prevented the condition (e.g., trauma or appendicitis).
5. *Injury*: Injury was the principal diagnosis.
6. *Alcohol-related*: The principal diagnosis was related to alcohol.
7. *Drug-related*: The principal diagnosis was related to drugs.
8. *Mental health-related*: The principal diagnosis was related to mental health.



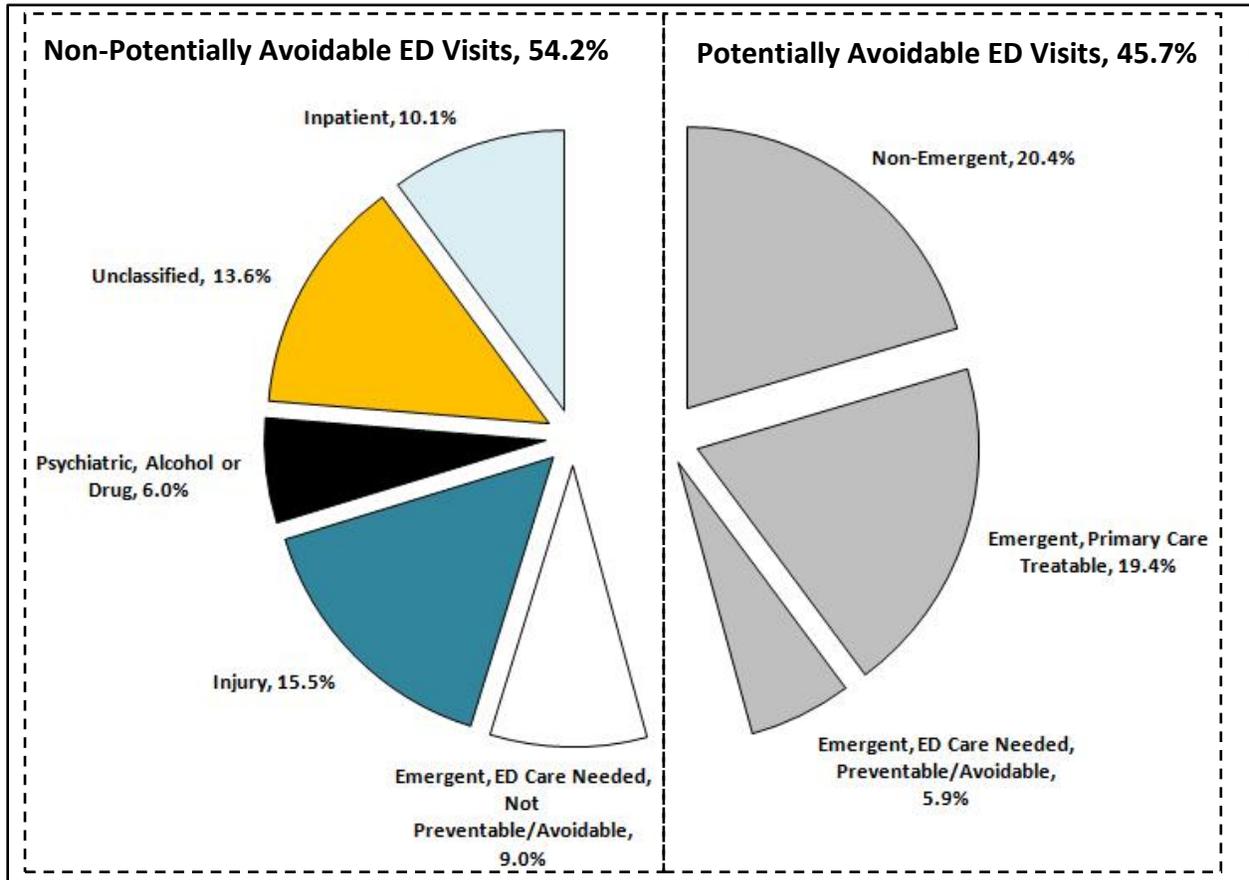
9. *Unclassified*: The condition was not classified in one of the above categories by the expert panel.

ED visits that fall into categories 1 through 3 may indicate problems with access to primary care, including access to after-hours primary care and urgent care centers. Figure 9 presents the distribution of all CY 2015 ED visits by NYU classification for individuals with any period of HealthChoice enrollment. ED visits are measured using MCO encounter and FFS claims data. See Appendix E for MCO-only ED visits by the NYU classification. In CY 2015, 45.7 percent of all ED visits were for potentially avoidable conditions, meaning that the ED visit could have been avoided if the condition resulting in the ED visit had been addressed with high quality and timely primary care.

ED visits in categories 4 (emergent, ED care needed, not preventable/avoidable) and 5 (injury) are the least likely to be prevented with access to primary care. These two categories accounted for 24.5 percent of all ED visits in CY 2015. Adults aged 40 through 64 years had more ED visits related to category 4 (emergent, ED care needed, not preventable/avoidable) compared to all other age groups. Children aged 3 through 18 years had more category 5 (injury-related) ED visits than other age groups. The inpatient category in Figure 9, which is not a part of the NYU classification, represents ED visits that resulted in a hospital admission. As would be expected, participants with disabilities had a much higher rate of ED visits that led to an inpatient admission than participants in the F&C and MCHP coverage groups.



Figure 9. ED Visits by HealthChoice Participants Classified According to NYU Avoidable Admissions Algorithm, CY 2015

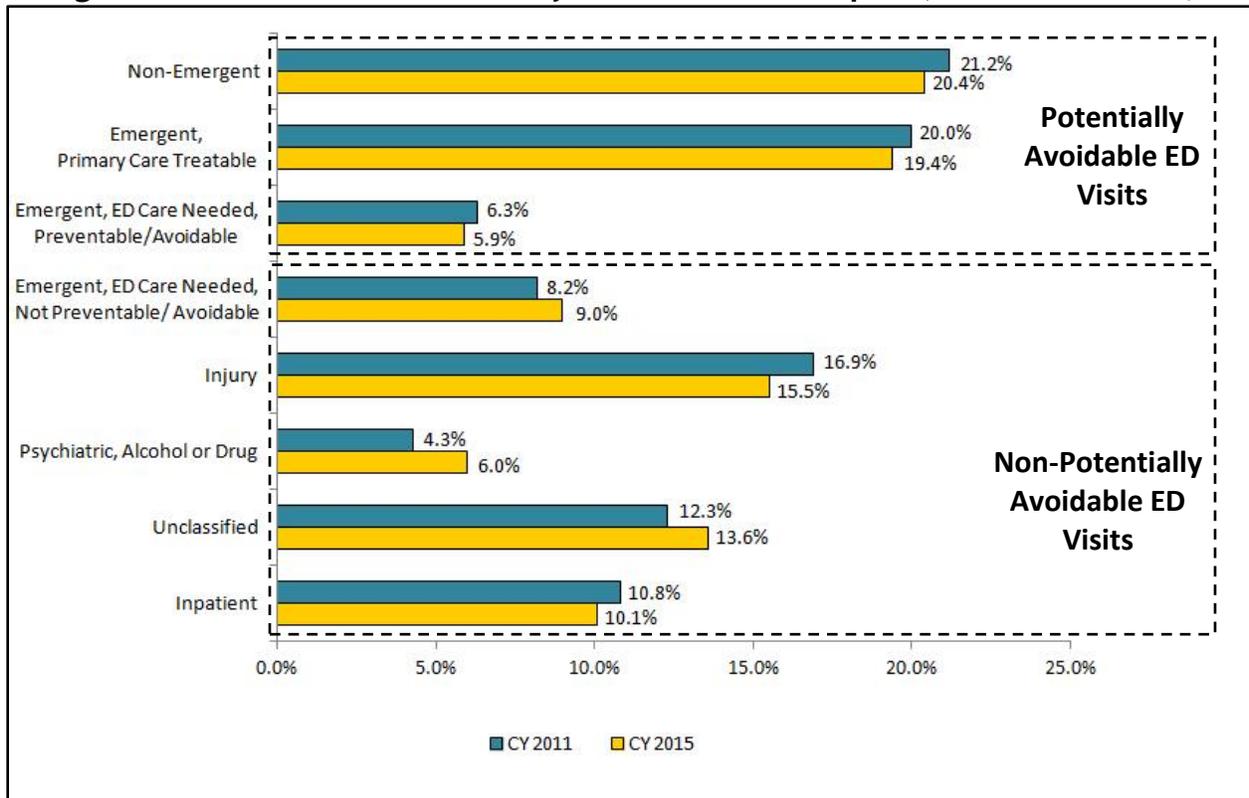


* ED visits that result in an inpatient stay are not a part of the NYU algorithm and have been added here in their own category.

Figure 10 compares the ED visit classifications for CY 2011 with the classifications for CY 2015. The data show that potentially avoidable ED visits covered by MCOs or FFS decreased during the evaluation period, from 47.5 percent of all ED visits in CY 2011 to 45.7 percent in CY 2015. To maintain this trend, the Department will continue to monitor ED use with the goal of reducing potentially avoidable ED visits. Appendix E compares the ED visit classifications for CY 2011 to CY 2015 for ED visits covered by MCOs.



Figure 10. Classification of ED Visits by HealthChoice Participants, CY 2011 and CY 2015



Preventable or Avoidable Admissions

Ambulatory care sensitive hospitalizations, also referred to as preventable or avoidable hospitalizations, are inpatient admissions that may have been prevented if proper ambulatory care had been provided in a timely and effective manner. High numbers of avoidable admissions may indicate problems with access to primary care services or deficiencies in outpatient management and follow-up. The Department monitors potentially avoidable admissions using AHRQ’s Prevention Quality Indicators (PQIs) methodology, which looks for specific primary diagnoses in hospital admission records indicating the conditions listed in each PQI. The measures presented are as follows:¹⁴

- PQI #1: Diabetes Short-Term Complications
- PQI #2: Perforated Appendix
- PQI #3: Diabetes Long-Term Complications
- PQI #5: Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults

¹⁴ AHRQ PQI Methodology Version 6.0



- PQI #7: Hypertension
- PQI #8: Congestive Heart Failure
- PQI #10: Dehydration
- PQI #11: Bacterial Pneumonia
- PQI #12: Urinary Tract Infection
- PQI #13: Angina Without Procedure
- PQI #14: Uncontrolled Diabetes
- PQI #15: Asthma in Younger Adults
- PQI #16: Lower-Extremity Amputation in Patients with Diabetes
- PQI #90:¹⁵ Prevention Quality Overall Composite
- PQI #91:¹⁶ Prevention Quality Acute Composite
- PQI #92:¹⁷ Prevention Quality Chronic Composite

The measure denominators include the number of HealthChoice participants with any period of enrollment who meet the following enrollment criteria:

- Aged 18 to 64 years as of December 31 of the calendar year
 - For PQI #5: Aged 40 to 64 years as of December 31 of the calendar year
 - For PQI #15: Aged 18 to 39 years as of December 31 of the calendar year
- Enrolled in the same HealthChoice MCO as of December 31 of the calendar year as the MCO that paid for the inpatient admission qualifying them for a PQI designation

Table 8 presents the number of potentially avoidable MCO and FFS inpatient admissions per 100,000 HealthChoice participants aged 18 to 64 years during CY 2011 through CY 2015. COPD or Asthma in Older Adults (PQI #5) was responsible for the highest number of potentially avoidable admissions throughout the evaluation period. The smallest numbers of potentially avoidable admissions were from Perforated Appendix (PQI #2), Angina without Procedure (PQI #13), Uncontrolled Diabetes (PQI #14), and Lower-Extremity Amputation in Patients with Diabetes (PQI #16). See Appendix F for the number of potentially avoidable MCO inpatient admissions per 100,000 HealthChoice participants aged 18 to 64 years.

¹⁵ PQI #90 includes PQI #s 1, 3, 5, 7, 8, 10, 11, 12, 13, 14, 15, and 16.

¹⁶ PQI #91 includes PQI #s 10, 11, and 12.

¹⁷ PQI #92 includes PQI #s 1, 3, 5, 7, 8, 13, 14, 15, and 16.



**Table 8. Number of Potentially Avoidable Inpatient Admissions
per 100,000 HealthChoice Participants Aged 18–64 Years, CY 2011–CY 2015***

| Any PQI # | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---|--------------|--------------|--------------|--------------|--------------|
| 1: Diabetes Short-Term Complications Admissions | 209 | 180 | 196 | 200 | 174 |
| 2: Perforated Appendix Admissions | 21 | 19 | 17 | 21 | 17 |
| 3: Diabetes Long-Term Complications Admissions | 231 | 192 | 196 | 155 | 134 |
| 5: COPD or Asthma in Older Adults Admissions (Ages 40-64) | 1,754 | 1,498 | 1,264 | 778 | 669 |
| 7: Hypertension Admissions | 106 | 80 | 66 | 73 | 61 |
| 8: Congestive Heart Failure Admissions | 294 | 250 | 249 | 224 | 219 |
| 10: Dehydration Admissions | 116 | 102 | 74 | 76 | 85 |
| 11: Bacterial Pneumonia Admissions | 288 | 237 | 218 | 198 | 162 |
| 12: Urinary Tract Infection Admissions | 199 | 165 | 149 | 109 | 98 |
| 13: Angina Without Procedure Admissions | 24 | 15 | 13 | 11 | 9 |
| 14: Uncontrolled Diabetes Admissions | 30 | 22 | 20 | 16 | 19 |
| 15: Asthma in Younger Adults Admissions (Ages 18-39) | 154 | 159 | 138 | 117 | 94 |
| 16: Lower-Extremity Amputation In Patients With Diabetes | 6 | 9 | 8 | 9 | 8 |
| 90: Prevention Quality Overall Composite | 2,117 | 1,797 | 1,652 | 1,436 | 1,280 |
| 91: Prevention Quality Acute Composite | 603 | 504 | 441 | 382 | 346 |
| 92: Prevention Quality Chronic Composite | 1,514 | 1,293 | 1,211 | 1,054 | 934 |

*This measure was changed for this year’s evaluation by presenting the number—rather than the percentage—of potentially avoidable admissions per 100,000 participants. The methodology for calculating inpatient admission rates was revised for this year’s evaluation. Revisions include updating the methodology for calculating inpatient stays across years.

Table 9 presents the number and percentage of adults aged 18 to 64 years with any period of enrollment who were enrolled in an MCO with at least one MCO or FFS inpatient admission and with PQI admissions during the evaluation period. Overall, the percentage of adults enrolled in HealthChoice with at least one inpatient admission with a PQI designation decreased from 1.4 percent in CY 2011 to 0.9 percent in CY 2015. This downward trend is consistent with the observed decrease in the percentage of participants with at least one MCO or FFS inpatient admission, from 15.5 percent in CY 2011 to 10.2 percent in CY 2015. Among HealthChoice adults with an inpatient admission, the percentage of participants with a PQI-designated admission dropped from 9.1 percent in CY 2011 to 8.0 percent in CY 2013 and then increased back to 9.1 percent in CY 2015. See Appendix F for potentially avoidable admission rates for MCO inpatient admissions.



Table 9. Potentially Avoidable Admission Rates among Participants Aged 18–64 Years with ≥1 Inpatient Admission, CY 2011–CY 2015*

| Year | # of Participants in HealthChoice | # of Participants with ≥1 Admission | % of Participants with ≥1 Admission | # of Participants with Any PQI | % of Participants with Any PQI | % of Participants With ≥1 Admission who had a PQI |
|---------|-----------------------------------|-------------------------------------|-------------------------------------|--------------------------------|--------------------------------|---|
| CY 2011 | 346,888 | 53,868 | 15.5% | 4,892 | 1.4% | 9.1% |
| CY 2012 | 364,528 | 52,294 | 14.3% | 4,480 | 1.2% | 8.6% |
| CY 2013 | 379,149 | 51,700 | 13.6% | 4,157 | 1.1% | 8.0% |
| CY 2014 | 636,719 | 72,302 | 11.4% | 6,454 | 1.0% | 8.9% |
| CY 2015 | 687,777 | 69,991 | 10.2% | 6,352 | 0.9% | 9.1% |

*This measure includes MCO and FFS inpatient admissions. The methodology for calculating inpatient admission rates was revised for this year’s evaluation. Revisions include updating the methodology for calculating inpatient stays across years.

Section II Summary

This section of the report addressed the extent to which the HealthChoice program provides participants with a medical home by assessing appropriateness of service utilization. In reviewing appropriateness of care, potentially avoidable ED visits decreased slightly (by 1.8 percentage points) during the evaluation period. The potentially avoidable admission rate for COPD or Asthma in Older Adults was the highest PQI throughout the evaluation period. The percentage of adult participants enrolled in HealthChoice with at least one admission with a PQI designation decreased from 1.4 percent in CY 2011 to 0.9 percent in CY 2015. This downward trend is consistent with the overall decrease in the percentage of adult participants with an MCO or FFS inpatient admission, from 15.5 percent in CY 2011 to 10.2 percent in CY 2015.



Section III. Quality of Care

Another goal of the HealthChoice program is to improve the quality of health services delivered. The Department has an extensive system for quality measurement and improvement that uses nationally recognized performance standards. Quality activities include the activities conducted by the External Quality Review Organizations (EQRO), which consist of Systems Performance Review, EPSDT/Healthy Kids review, Performance Improvement Project (PIP) validation, and encounter data validation. Other quality activities are the CAHPS survey of consumer satisfaction, value-based purchasing (VBP) program, and HEDIS quality measurements.¹⁸ HEDIS data are validated by nationally certified auditors to ensure that all plan participants collect data using an identical methodology, which allows for meaningful comparisons across health plans.¹⁹ The Department also reviews a sample of medical records to ensure that MCOs meet EPSDT standards. This section of the report presents highlights of these quality improvement activities related to preventive care and care for chronic conditions.

Because of NCQA restrictions, national HEDIS means cannot be published. Therefore, a “+” sign indicates that Maryland’s rate is above the national HEDIS mean, while a “-” sign indicates that Maryland’s rate is below the national mean.

Preventive Care

HEDIS Childhood Measures

The Department uses HEDIS measures to report childhood immunization and well-child visit rates. Immunizations are evidence-based interventions that safely and effectively prevent severe illnesses, such as polio and hepatitis (HealthcareData Company, LLC, 2016). The HEDIS immunization measures include the percentage of two-year-olds who received the following immunizations on or before their second birthday: four diphtheria, tetanus, and acellular pertussis (DTaP); three polio (IPV); one measles, mumps, and rubella (MMR); three H influenza type B (Hib); three hepatitis B; one chicken pox (VZV); and four pneumococcal conjugate (PCV) vaccines. HEDIS calculates a rate for each vaccine and nine different combination rates. Immunization Combination Two includes all of these vaccines except the four PCV; Combination Three includes each of the above listed vaccines with its appropriate number of doses. The Department compares health plan rates for immunization Combinations Two and Three.

¹⁸ A copy of the 2016 Annual Technical Report can be found at <https://mmcp.dhmdh.maryland.gov/healthchoice/Documents/2016%20Annual%20Technical%20Report.pdf>.

¹⁹ A copy of the HEDIS 2016 results can be found at <https://mmcp.dhmdh.maryland.gov/healthchoice/Documents/Statewide%20Executive%20Summary%20HealthChoice%20Participating%20Organization%20HEDIS%202016.pdf>.



Table 10 presents the immunization and well-child measures for the HealthChoice population. HealthChoice performed above the national HEDIS mean across all measures from CY 2011 through CY 2015. Key findings from the table include:

- The percentage of two-year-old children receiving immunization Combination Two rebounded from a low of 76.5 percent in CY 2014 to 83.8 percent in CY 2015, 1.3 percentage points higher than the rate in CY 2011.
- The percentage of two-year-old children receiving immunization Combination Three rebounded from a low of 73.5 percent in CY 2014 to 82.1 percent in CY 2015, 2.4 percentage points higher than the rate in CY 2011.
- The percentage of 15-month-old infants who received at least five well-child visits rebounded from a low of 79.5 percent in CY 2014 to 81.8 percent in CY 2015. The CY 2015 rate, however, is 3.2 percentage points lower than the rate in CY 2011.
- The percentage of children aged three to six years who received at least one well-child visit rose by 0.7 percentage points between CY 2014 and CY 2015. The CY 2015 rate, however, is 2.3 percentage points lower than the rate in CY 2011.
- The percentage of adolescents aged 12 to 21 years who received at least 1 well-care visit rose by 3.5 percentage points between CY 2014 and CY 2015. The CY 2015 rate, however, is 1.4 percentage points lower than the rate in CY 2011.

CY 2014 rate declines can be explained by the inclusion of rates from newer MCOs into the average rate calculations. Childhood immunization Combination Three, well-child visits for three- to six-year-olds, and well-care visits for adolescents are a part of the VBP program.

**Table 10. HEDIS Immunizations and Well-Child Visits:
HealthChoice Compared with the National HEDIS Mean, CY 2011–CY 2015***

| HEDIS MEASURES | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|--|---------|---------|---------|---------|---------|
| Childhood Immunization Status - Combination 2 | | | | | |
| HealthChoice | 82.5% | 80.2% | 80.9% | 76.5% | 83.8% |
| National HEDIS Mean | + | + | + | + | + |
| Childhood Immunization Status - Combination 3 | | | | | |
| HealthChoice | 79.7% | 77.7% | 79.1% | 73.5% | 82.1% |
| National HEDIS Mean | + | + | + | + | + |
| Well Child Visits - 15 Months of Life | | | | | |
| HealthChoice | 85.0% | 83.9% | 85.7% | 79.5% | 81.8% |
| National HEDIS Mean | + | + | + | + | + |
| Well Child Visits - 3- to 6-year-olds | | | | | |
| HealthChoice | 85.0% | 82.2% | 84.0% | 82.0% | 82.7% |
| National HEDIS Mean | + | + | + | + | + |
| Well-Care Visits - Adolescents | | | | | |
| HealthChoice | 67.0% | 65.4% | 67.3% | 62.1% | 65.6% |
| National HEDIS Mean | + | + | + | + | + |

*The HealthChoice averages in CY 2014 were impacted by the inclusion of HEDIS rates from newer MCOs.



EPSDT Review

The EPSDT program is a required package of benefits for all Medicaid participants under the age of 21 years. The purpose of EPSDT is to ensure that children receive appropriate age-specific physical examinations, developmental assessments, and mental health screenings periodically to identify any deviations from expected growth and development in a timely manner. Maryland's EPSDT program aims to support access and increase the availability of quality health care. The goal of the EPSDT review is to examine whether EPSDT services are provided to HealthChoice participants in a timely manner. The review is conducted annually to assess HealthChoice provider compliance with the following five EPSDT components:

- *Health and developmental history:* A personal and family medical history helps the provider determine health risks and provide appropriate anticipatory guidance and laboratory testing.
- *Comprehensive physical exam:* The exam includes vision and hearing tests, oral assessment, nutritional assessment, and measurements of head circumference and blood pressure.
- *Laboratory tests/at-risk screenings:* These tests involve assessing the risk factors related to heart disease, anemia, tuberculosis, lead exposure, and sexually transmitted infections.
- *Immunizations:* Providers who serve HealthChoice participants must offer immunizations according to the Department's recommended childhood immunization schedule.
- *Health education/anticipatory guidance:* Maryland requires providers to discuss at least three topics during a visit, such as nutrition, injury prevention, and social interactions. Referrals for dental care are required after a patient turns two years old.

MCOs use the review results to inform their education efforts to participants and providers about EPSDT services. The Department has a Healthy Kids Program, whose nurse consultants support the MCOs and educate them on new EPSDT requirements. The Department also collaborates with MCOs to share with their provider networks age-appropriate encounter forms, risk assessment forms, and questionnaires that are designed to assist with documenting preventive services according to the Maryland Schedule of Preventive Health Care.

From CY 2011 to CY 2015, provider compliance increased for three of the five EPSDT components (Table 11). These components are health and developmental history, comprehensive physical exam, and health education/anticipatory guidance. The HealthChoice Aggregate Total score remained stable during the evaluation period (Delmarva Foundation, 2015, 2017). Despite slight variations, all components and the aggregate total have remained above the minimum compliance score of 75 percent through CY 2014. In CY 2015, the minimum compliance score was raised to 80 percent. Four of the five EPSDT components—with Laboratory Tests/At-Risk Screenings being the exception—achieved the elevated benchmark.



Table 11. HealthChoice MCO Aggregate Composite Scores for Components of the EPSDT Review, CY 2011–CY 2015*

| EPSDT Components | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|--|------------|------------|------------|------------|------------|
| Health and Developmental History | 89% | 89% | 89% | 88% | 92% |
| Comprehensive Physical Exam | 92% | 93% | 91% | 93% | 93% |
| Laboratory Tests/At-Risk Screenings | 79% | 80% | 77% | 76% | 78% |
| Immunizations | 88% | 86% | 84% | 83% | 84% |
| Health Education/Anticipatory Guidance | 90% | 92% | 89% | 91% | 92% |
| HealthChoice Aggregate Total | 89% | 89% | 87% | 88% | 89% |

*The minimum compliance score was raised to 80 percent in CY 2015.

Childhood Lead Testing

The Department is a member of Maryland’s Lead Poisoning Prevention Commission, which advises Maryland executive agencies, the General Assembly, and the Governor on lead poisoning prevention in the state. Maryland’s Plan to Eliminate Childhood Lead Poisoning includes a goal of ensuring that young children receive appropriate lead risk screening and blood lead testing. As part of the work plan for achieving this goal, the Department provides the MCOs with quarterly reports on children who received blood lead tests and children with elevated blood lead levels to ensure that these children receive appropriate follow-up.²⁰ The Department also includes blood lead testing measures in several of its quality assurance activities, including the VBP and Managing-for-Results programs.

As part of the EPSDT benefits, Medicaid requires that all children be provided or referred for a blood lead test at 12 and 24 months of age. The Department measures the lead testing rates for children aged 12 through 23 months and 24 through 35 months who are continuously enrolled in the same MCO for at least 90 days.²¹ A child’s lead test must have occurred during the calendar year or the year prior.

Table 12 presents the lead testing rates for children aged 12 through 23 months and 24 through 35 months between CY 2011 and CY 2015. In CY 2015, the lead testing rate was 60.7 percent for children aged 12 through 23 months and 77.6 percent for children aged 24 through 35 months. Rates for both age groups have increased slightly over the five-year evaluation period.

²⁰ Starting in CY 2017, this reporting increased from quarterly to monthly.

²¹ The lead testing measures count lead tests reported through Medicaid administrative data and the Childhood Lead Registry, which is maintained by the Maryland Department of the Environment.



Table 12. Percentage of HealthChoice Children Aged 12–23 and 24–35 Months who Received a Lead Test During the Calendar Year or the Prior Year, CY 2011–CY 2015

| Age Group (Months) | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|--------------------|---------|---------|---------|---------|---------|
| 12–23 | 57.4% | 57.9% | 58.7% | 60.6% | 60.7% |
| 24–35 | 76.6% | 75.6% | 76.6% | 75.6% | 77.6% |

In 2012, the Centers for Disease Control and Prevention (CDC) issued the recommendation to remove the “level of concern” language from 10 micrograms per deciliter and replace it with the “reference level” of five micrograms per deciliter and require statewide testing of all children. Maryland adopted these recommendations for all children born on or after January 1, 2015.

In 2016, Medicaid submitted a Joint Chairman’s Report with additional recommendations to improve lead testing rates. Recommendations include implementing a PIP with HealthChoice MCOs in coming years to ensure that all children receive blood lead tests; submission of a Health Services Initiative State Plan Amendment to provide CHIP funding for lead abatement in homes of Maryland children; and improving data quality of the Childhood Lead Registry, including complete collection of required information and addition of new data fields such as Medicaid ID number. These recommendations are under consideration and will help accelerate progress toward the goals of increasing screening rates among children and improving children’s long-term health outcomes.

Breast Cancer Screening

Breast cancer is the most prevalent type of cancer among women (U.S. Cancer Statistics Working Group, 2016). The U.S. Cancer Statistics Working Group (2016) reported a national breast cancer incidence rate of 123.7 cases per 100,000 women in 2013, the most recent data available. In Maryland, the breast cancer incidence rate was 134.1 cases per 100,000 women, which is significantly higher than the national average (U.S. Cancer Statistics Working Group, 2016). When breast cancer is detected early, it is easier to treat, and women have a greater chance of survival (CDC, 2014). According to the CDC (2014), mammograms are the most effective technique for early detection of breast cancer. HEDIS assesses the percentage of women who received a mammogram within a two-year period. Although there has been recent debate regarding the appropriate age requirements for mammograms, HEDIS continues to utilize the 40- to 69-year-old female cohort for this measure.²²

Table 13 presents the percentage of women in HealthChoice who received a mammogram for breast cancer screening in CY 2011 through CY 2015 (HealthcareData Company, LLC, 2016). Between CY 2011 and CY 2015, the percentage of women aged 40 through 64 years who received a mammogram increased by nearly 20 percentage points. The rate increased by almost

²² Because HealthChoice only covers adults through the age of 64, the measures presented in the table are restricted to women aged 40 through 64 years.



10 percentage points between CY 2013 and CY 2014. Maryland performed above the national HEDIS mean in CY 2013 through CY 2015. A possible explanation for the rate increase could be the addition of breast cancer screening to the VBP program in CY 2014.

Table 13. Percentage of Women in HealthChoice Aged 40-64 Years who Received a Mammogram for Breast Cancer Screening, Compared with the National HEDIS Mean, CY 2011–CY 2015*

| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---|---------|---------|---------|---------|---------|
| Percentage of Women in HealthChoice Aged 40–64 Years who Received a Mammogram | 50.3% | 51.0% | 58.3% | 67.9% | 70.0% |
| National HEDIS Mean | - | - | + | + | + |

*The HealthChoice averages in CY 2014 were impacted by the inclusion of HEDIS rates from newer MCOs.

Cervical Cancer Screening

Cervical cancer is preventable and treatable, and the CDC recommends Papanicolaou (Pap) tests for cervical cancer screening in women who are sexually active or over the age of 21 years (CDC, n.d.b). Because Pap screenings can detect precancerous cells early, cervical cancer can be treated or prevented (CDC, n.d.b). HEDIS measures the percentage of women who received a cervical cancer screening using one of these criteria: 1) women aged 21 to 64 years who had cervical cytology performed every three years, or 2) women aged 30 to 64 years who had cervical cytology/human papillomavirus (HPV) co-testing performed every five years.

Table 14 presents the percentage of women aged 21 to 64 years in HealthChoice who received a cervical cancer screening in CY 2011 through CY 2015 (HealthcareData Company, LLC, 2016). Between CY 2011 and CY 2013, the cervical cancer screening rate steadily increased. However, in CY 2014, the screening rate decreased by 9.4 percentage points from CY 2013. The decline continued in CY 2015, dropping another 0.7 percentage points. This decline in performance may be explained by the inclusion of a new HealthChoice MCO into the average rate calculation. HEDIS scores were dramatically affected because the methodology uses a simple average to calculate overall HealthChoice HEDIS scores instead of a weighted average. Excluding the newer MCOs, the rate for the more-established HealthChoice MCOs was 66.8 percent for CY 2015. Despite these outliers, HealthChoice performed above the national HEDIS mean throughout the measurement period.



Table 14. Percentage of Women in HealthChoice Aged 21–64 Years who Received a Cervical Cancer Screening, Compared with the National HEDIS Mean, CY 2011–CY 2015*

| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---|---------|---------|---------|---------|---------|
| Percentage of Women in HealthChoice Aged 21–64 Years who Received a Cervical Cancer Screening | 73.1% | 73.7% | 75.2% | 65.8% | 65.1% |
| National HEDIS Mean | + | + | + | + | + |

*HealthChoice averages in CYs 2014 and 2015 were impacted by the inclusion of HEDIS rates from newer MCOs.

HPV Vaccine for Female Adolescents

The Department has increased efforts to vaccinate young women against HPV. According to the CDC (2015), about 14 million people, including teens, become infected with HPV each year, posing a significant public health risk. HPV is a common virus that spreads by sexual contact and can cause cervical cancer in women and penile cancer in men. HPV can also cause anal cancer, throat cancer, and genital warts in both men and women (CDC, 2015).

Administering widespread vaccinations for HPV has the potential to drastically reduce the number of cervical cancer cases. In 2014, the HEDIS HPV vaccination rates became available for the first time. HEDIS assesses the percentage of 13-year-old females who received three doses of the HPV vaccine by their 13th birthday.²³ In CY 2014, 22.8 percent of female adolescents received the HPV vaccine by their 13th birthday (Table 15) (HealthcareData Company, LLC, 2016). This rate improved by 5.1 percentage points in CY 2015. These rates are higher than the national HEDIS mean. The federal Advisory Committee on Immunization Practices (ACIP) recommends vaccination for adolescents, but it is not a requirement. All ACIP-recommended vaccines are provided at no cost to the state by the federal government.

Table 15. Percentage of Female Adolescents in HealthChoice Aged 13 Years who Received the HPV Vaccine, Compared with the National HEDIS Mean, CY 2014–CY 2015

| | CY 2014 | CY 2015 |
|---|---------|---------|
| Percentage of Female Adolescents in HealthChoice Aged 13 Years who Received 3 Doses of the HPV Vaccine by Their 13 th Birthday | 22.8% | 27.9% |
| National HEDIS Mean | + | + |

²³ The HPV vaccine is recommended for both males and females, although the HEDIS measure focuses exclusively on females. Other state initiatives, including Healthy People 2020, track vaccination for both males and females at an older age, from 13 to 15 years of age.



Colorectal Cancer Screening

According to the National Cancer Institute (2014), colorectal cancer is one of the most common cancers in both men and women. In Maryland, colorectal cancer is the fourth most commonly diagnosed cancer among women and men, as well as the third-leading cause of cancer mortality.²⁴ The expansion of Medicaid coverage to childless adults and additional parents and caretakers has removed a major access barrier for age-eligible adults with low income to be screened for colorectal cancer.

Colorectal cancer usually develops from precancerous polyps (abnormal growths) in the colon or rectum. Screening tests can find precancerous polyps that can be removed before they become cancerous (CDC, 2016a). Screening tests can also detect colorectal cancer early, when treatment is more effective (National Cancer Institute, 2014). HEDIS assesses the percentage of people aged 50 through 75 years who received an appropriate screening for colorectal cancer within a specific timeframe. HEDIS defines an “appropriate screening” as follows: a fecal occult blood test (FOBT) during the measurement year, a flexible sigmoidoscopy during the measurement year or the prior four years, and a colonoscopy during the measurement year or the prior nine years.

Table 16 shows the percentage of HealthChoice participants who received at least one of the three appropriate screenings for colorectal cancer in CY 2011 through CY 2015. Please note that the HEDIS specifications include individuals through age 75 years, but HealthChoice only covers individuals through age 64 years. Thus, the data presented pertain to enrollees aged 50 through 64 years and are based exclusively on administrative data.²⁵ Only participants who met the HEDIS eligibility requirements were included in the population for this measure. These participants were continuously enrolled in Medicaid during the calendar year and the preceding calendar year. Participants must have also been enrolled as of the last day of the measurement year and could not have more than one gap of enrollment exceeding 45 days during each year of continuous enrollment. Given these noted variations in measure, these results should be interpreted for year-over-year trends, as opposed to a comparison between Medicaid enrollees and other populations.

²⁴ Maryland Comprehensive Cancer Control Plan 2016 - 2020, Maryland Department of Health and Mental Hygiene. Available at http://phpa.dhmh.maryland.gov/cancer/cancerplan/Documents/MD%20Cancer%20Program_508C%20with%20cover.pdf. Last accessed April 20, 2017.

²⁵ HEDIS does not currently have a measure for colorectal cancer screening for Medicaid; the corresponding commercial measure includes individuals between the ages of 50 and 75. The commercial measure relies on a hybrid approach, using both claims and clinical data, whereas the measures in Table 14 do not use clinical data. The results represent individuals across the Medicaid population—i.e., if an individual is up-to-date with colorectal screening but switched between MCOs or FFS coverage over the course of the reference period, the participant will be counted as up-to-date.. The measure excludes participants with a diagnosis of colorectal cancer or removal of the colon from the denominator.



Between CY 2011 and CY 2015, the percentage of enrollees aged 50 through 64 years who received a colorectal cancer screening decreased by 4.3 percentage points. Two of the screenings, flexible sigmoidoscopy and colonoscopy, can be completed within the prior four and nine years, respectively. The group of newly enrolled ACA participants did not have the full length of time to complete screenings compared to participants who had been eligible for HealthChoice for a longer period of time. Additionally, the measure was modified for CY 2015 to include surgical procedures, which were not included in previous years.

Table 16. Percentage of HealthChoice Participants Aged 50 – 64 Years who Received a Colorectal Cancer Screening, CY 2011–CY 2015

| CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---------|---------|---------|---------|---------|
| 39.3% | 38.8% | 38.7% | 32.1% | 35.0% |

Care for Chronic Conditions

Medication Management for People with Asthma

Asthma is a common chronic disease that affects more than 32 million American children and adults (CDC, n.d.a). In 2010, approximately 752,000 adults and children in Maryland had a history of asthma (Bankoski, De Pinto, Hess-Mutinda, & McEachern, 2012). The Department uses HEDIS to report medication management for people with asthma. This HEDIS asthma measure includes the percentage of 5- to 64-year-olds identified as having persistent asthma and who remained on an asthma controller medication for at least 50 or 75 percent of their treatment period. The purpose of asthma medications is to prevent or reduce airway inflammation and narrowing. If asthma medications are used correctly, asthma-related hospitalizations, ED visits, and missed school and work days decrease (CDC, n.d.a).

Table 17 presents the percentage of HealthChoice participants who remained on asthma controller medication for at least 50 percent of their treatment period in CY 2012 through CY 2015 (HealthcareData Company, LLC, 2016). This HEDIS measure was introduced in CY 2012. The HealthChoice participants evaluated for this measure are 5 to 64 years old. In CY 2015, 56.9 percent of HealthChoice participants aged 5 through 64 years remained on asthma controller medication for at least 50 percent of their treatment period. This was the first year the program outperformed the national HEDIS mean.



Table 17. Percentage of HealthChoice Members Aged 5–64 Years who Remained on an Asthma Controller Medication for at Least 50% of Their Treatment Period, CY 2012–CY 2015

| | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---|---------|---------|---------|---------|
| Percentage of HealthChoice Members Aged 5–64 Years who Remained on an Asthma Controller Medication for at Least 50% of Their Treatment Period | 46.3% | 49.7% | 51.5% | 56.9% |
| National HEDIS Mean | * | - | - | + |

* National HEDIS means are not available CY 2012 because this was the first year this HEDIS measure was introduced.

Table 18 presents the percentage of HealthChoice participants who remained on asthma controller medication for at least 75 percent of their treatment period in CY 2012 through CY 2015 (HealthcareData Company, LLC, 2016). This HEDIS measure was introduced in CY 2012. The HealthChoice participants evaluated for this measure are 5 to 64 years old. In CY 2015, 34.1 percent of HealthChoice participants aged 5 through 64 years remained on asthma controller medication for at least 75 percent of their treatment period. This was the first year the program outperformed the national HEDIS mean.

Table 18. Percentage of HealthChoice Members Aged 5–64 Years who Remained on an Asthma Controller Medication for at Least 75% of Their Treatment Period, CY 2012–CY 2015

| | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---|---------|---------|---------|---------|
| Percentage of HealthChoice Members Aged 5–64 Years who Remained on an Asthma Controller Medication for at Least 75% of Their Treatment Period | 24.3% | 25.8% | 27.0% | 34.1% |
| National HEDIS Mean | * | - | - | + |

* National HEDIS means are not available CY 2012 because this was the first year this HEDIS measure was introduced.

Comprehensive Diabetes Care

Diabetes is a disease caused by the inability of the body to make or use the hormone insulin. Serious complications of diabetes include heart disease, kidney disease, stroke, and blindness. However, screening and treatment can reduce the burden of diabetes complications (CDC, 2016b). To assess appropriate and timely screening and treatment for adults with diabetes (types 1 and 2), HEDIS includes a composite set of measures, referred to as comprehensive diabetes care, which include eye exams, HbA1c testing, and low-density lipoprotein cholesterol (LDL-C) screening. Measure definitions and key findings include the following:

- *Eye Exams*: This measure assesses the percentage of participants aged 19 through 64 years with diabetes who received an eye exam for diabetic retinal disease during the measurement year *or* had a negative retinal exam (i.e., no evidence of retinopathy) in the year prior to the measurement year. The percentage of participants with diabetes who received an eye exam decreased steadily until CY 2014, when it decreased by 7.8



percentage points from CY 2013. This decline continued in CY 2015, reaching 60.2 percent. Eye exams were removed from VBP incentive payments in CY 2015; the observed decrease could be a result of the reduced incentive for MCOs to provide this service.

- *HbA1c Testing*: This measure assesses the percentage of participants aged 19 through 64 years with diabetes who received at least one hemoglobin A1c (HbA1c) test during the measurement year. This measure is a part of the VBP program. The percentage of participants with diabetes who received an HbA1c test increased by 7.8 percentage points during the measurement period after being added to the VBP measures, but fell by 0.2 percentage points between CY 2014 and CY 2015.
- *LDL-C Screening*: This measure assesses the percentage of participants aged 19 through 64 years with diabetes who received at least one LDL-C screening in the measurement year. This measure was retired in CY 2014. Before the measure was retired in CY 2014, the percentage of participants with diabetes who received an LDL-C screening increased by 0.8 percentage points during the measurement period.

Table 19 presents annual HealthChoice performance on the comprehensive diabetes care measures for CY 2011 through CY 2015 (HealthcareData Company, LLC, 2016). HealthChoice consistently performed above the national HEDIS mean on eye exams throughout the evaluation period. HealthChoice performed above the national average rate for HbA1c testing in CY 2013 through CY 2015. However, it is worth noting that the HealthChoice participants evaluated for this measure are 19 to 64 years old, while the HEDIS measure used as the benchmark evaluates adults aged 19 to 75 years.

Table 19. Percentage of HealthChoice Members Aged 19–64 Years with Diabetes who Received Comprehensive Diabetes Care, Compared with the National HEDIS Mean, CY 2011–CY 2015*

| HEDIS MEASURES | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---------------------------|---------|---------|---------|---------|---------|
| Eye Exam (Retinal) | | | | | |
| HealthChoice | 71.0% | 69.6% | 69.3% | 61.5% | 60.2% |
| National HEDIS Mean | + | + | + | + | + |
| HbA1c Test | | | | | |
| HealthChoice | 81.0% | 81.2% | 85.5% | 89.0% | 88.8% |
| National HEDIS Mean | - | - | + | + | + |
| LDL-C Screening** | | | | | |
| HealthChoice | 76.4% | 75.7% | 77.2% | N/A | N/A |
| National HEDIS Mean | + | + | + | | |

*The HealthChoice averages in CY 2014 were impacted by the inclusion of HEDIS rates from newer MCOs into the calculation.

**This measure was retired for CY 2014.



Section III Summary

This section of the report discussed the HealthChoice goal of improving quality of care and focused on preventive care and care for chronic conditions. Regarding preventive care for children, participants in the HealthChoice program attained higher rates across all well-child and immunization measures than the national HEDIS mean for all years. Immunization Combination Two and Combination Three rates in the HealthChoice program rebounded significantly from CY 2014 to CY 2015, increasing by 7.3 and 8.6 percentage points, respectively. Regarding EPSDT, provider compliance increased for three of the five components, with four components meeting the minimum compliance score of 80 percent.

Regarding preventive care for adults, HealthChoice performed above the national HEDIS mean for breast cancer screening (CY 2013 to CY 2015) and cervical cancer screening (CY 2011 to CY 2015). Breast cancer screening improved during the evaluation period by nearly 20 percentage points. For participants with diabetes, HbA1c testing rates improved during the evaluation period. The HbA1c testing rates were above the national HEDIS means for CY 2013 through CY 2015, eye exams exceeded national HEDIS means in all years, and LDL-C screening rates were above the national HEDIS means from CY 2011 to CY 2013.

Beginning in CY 2014, the HealthChoice program had a large influx of adults who had never been enrolled in Medicaid. These new participants took longer to engage in appropriate primary care treatment, which affected the scores of HEDIS measures that are based on using services. In addition, new MCOs came on the market in CY 2013 and CY 2014, and it took time for their encounter data to become complete. Although the new MCOs served fewer members (about 4 percent of all HealthChoice membership), the overall HEDIS scores were dramatically affected because the methodology uses a simple average to calculate overall HealthChoice HEDIS scores instead of a weighted average. The six more-established MCOs continued to have consistent quality results.



Section IV. Special Topics

This section of the report discusses several special topics, including services provided under the dental and mental health carve-outs, SUD services, behavioral health integration, services provided to children in foster care, reproductive health services, services provided to individuals with HIV/AIDS, the REM program, and access to care stratified by race/ethnicity. Unless otherwise stated, all measures in this section are calculated for HealthChoice participants with any period of enrollment in HealthChoice during the calendar year.

Dental Services

EPSDT mandates dental care coverage for children younger than 21 years. Children enrolled in Maryland Medicaid, however, have historically utilized these services at a low rate. Before Maryland implemented HealthChoice in 1997, only 14 percent of children enrolled in Medicaid for any period of time received at least one dental service, which was below the national average of 21 percent (American Academy of Pediatrics, n.d.).

In an effort to increase access to oral health care and service utilization, the Secretary of Health convened the Maryland Dental Action Committee (MDAC) in 2007. MDAC consisted of a broad-based group of stakeholders concerned about children's access to oral health services. MDAC reviewed dental reports and data and presented its final report to the Department.²⁶ Maryland's current oral health achievements are a direct result of the state's progress in implementing MDAC's 2007 key recommendations, which called for increasing access to oral health services through changes to Maryland Medicaid and expanding the public health dental infrastructure. Expanded access to dental care has also been achieved through the following initiatives of the Medicaid program and the Office of Oral Health:

- Increased dental provider payment rates in 2008, with plans to increase rates further as the budget allows.
- Implemented an ASO in July 2009 to oversee Medicaid dental benefits for pregnant women, children, and adults in the REM program (the Maryland Healthy Smiles Program).
- Authorized EPSDT-certified medical providers (pediatricians, family physicians, and nurse practitioners), after successful completion of an Office of Oral Health training program, to receive Medicaid reimbursement for fluoride varnish treatment and oral assessment services provided to children between 9 and 36 months of age. As of FY 2013, 441 unique EPSDT-certified providers administered more than 84,000 fluoride varnish treatments.

²⁶ MDAC's 2007 report can be found here:

<https://phpa.health.maryland.gov/oralhealth/Documents/DACFullReport2007.pdf>



- Allowed public health dental hygienists to perform services within their scope of practice without onsite supervision and prior examination of the patient by a dentist. This change permitted public health dental hygienists to provide services outside of a dental office.

In 2010 and 2011, The Pew Center on the States named Maryland a national leader in improving dental care access for children of families with low income, especially the Medicaid-eligible and uninsured. Because Maryland is the only state to meet seven of the eight dental policy benchmarks, The Pew Center ranked Maryland first in the nation for oral health among children (The Pew Center on the States, 2011). CMS also recognized Maryland’s improved oral health service delivery by asking Maryland to share its story at a CMS national quality conference in August 2011, including achievements in its best practices guide for states and their governors through the Medicaid State Technical Assistance Team (MSTAT) process. In addition, Maryland was invited to present in the inaugural *CMS Learning Lab: Improving Oral Health through Access* web seminar series in 2012.

At the conclusion of the 2013 legislative session, the Maryland General Assembly requested the Department to provide a report on the utilization of pediatric dental surgery, one of the mandated dental services under EPSDT. The goal of pediatric restorative dental surgery is to repair or limit the damage from caries, protect and preserve the tooth structure, reestablish adequate function, restore aesthetics (where applicable), and provide ease in maintaining good oral hygiene. In its report, the Department made several recommendations designed to improve access to pediatric dental surgery:²⁷

- Increase the payment rate for anesthesia (CPT code 00710) to 100 percent of the Medicare rate
- Encourage hospitals to offer operating room (OR) block times for dental cases to improve access to hospital facilities by dentists
- Establish a facility rate to pay ambulatory surgery centers (ASCs) to increase the number of sites where dentists may perform OR procedures and reduce pressure on hospitals
- Require hospitals to report stipends paid to hospital-based physicians and anesthesiologists as part of a larger analysis—conducted by the Department in partnership with the Health Services Cost Review Commission (HSCRC)—of the proper reimbursement rate for providers

The Department continues to monitor a variety of dental service utilization measures that it publishes in the Annual Oral Health Legislative Report.²⁸ Table 20 displays the dental service

²⁷ The 2013 Joint Chairmen’s Report – Report on Pediatric Restorative Dental Surgery and Analysis of Rates for Anesthesia Services can be found here: <https://mmcp.dhmh.maryland.gov/Documents/pediatricdentalJCRfinal9-13.pdf>

²⁸ The Annual Oral Health Legislative Reports can be found here: <https://mmcp.health.maryland.gov/Pages/Reports-and-Publications.aspx>



utilization rate for children. The dental service utilization rate among children aged 4 to 20 years increased by 2.4 percentage points, from 66.6 percent in CY 2011 to 69.0 percent in CY 2015. Nevertheless, many children still do not receive the dental services they need.

Table 20. Number of Children Aged 4-20 Years Enrolled in Medicaid* for at least 320 Days who Received a Dental Service, CY 2011–CY 2015

| Year | Total Number of Enrollees | Enrollees Receiving One or More Dental Services | Percentage Receiving a Service |
|---------|---------------------------|---|--------------------------------|
| CY 2011 | 362,197 | 241,365 | 66.6% |
| CY 2012 | 385,132 | 261,077 | 67.8% |
| CY 2013 | 405,873 | 277,272 | 68.3% |
| CY 2014 | 423,625 | 286,713 | 67.7% |
| CY 2015 | 404,118 | 278,796 | 69.0% |

*The study population for CY 2011 through CY 2015 measured dental utilization for all qualifying individuals in Maryland’s Medical Assistance program, including FFS and HealthChoice MCO enrollees. The following coverage groups were excluded from the analysis: S09, X02, W01, and P10.

Dental care is also a benefit for pregnant women. To ensure that this population is aware of the dental benefit, the ASO contracted to run the Maryland Healthy Smiles program runs targeted communication efforts. The ASO conducted postcard and flyer-based mailings to women enrolled in pregnancy-related coverage groups to engage them in care during the evaluation period. The ASO also participated in community-based events, such as Head Start Parent meetings and Women, Infants, and Children (WIC) meetings. The Department anticipates further positive progress in these measurement areas following the procurement of a new ASO in 2016. The ASO is in the process of embarking on a comprehensive five-year plan designed to improve the engagement of pregnant women in dental care. At the heart of this program are the assignment of pregnant women to a dental home, enhanced individualized outreach by phone and through other mechanisms to ensure pregnant women are aware of their dental benefit and how to access services, and the formation of partnerships with key partners, such as OB/GYN providers.

Table 21 presents the percentage of pregnant women aged 21 years and older who were enrolled for at least 90 days in Medicaid and received at least one dental service between CY 2011 and CY 2015. During that time period, dental service utilization continually decreased from 32.1 percent in CY 2011 to 27.0 percent in CY 2014, but then slightly increased to 27.3 percent in CY 2015.



Table 21. Number and Percentage of Pregnant Women Aged 21+ Years with at least 90 Days in Medicaid* who Received a Dental Service, CY 2011–CY 2015

| Year | Total Number of Enrollees | Enrollees Receiving One or More Dental Services | Percentage Receiving a Service |
|---------|---------------------------|---|--------------------------------|
| CY 2011 | 20,990 | 6,728 | 32.1% |
| CY 2012 | 22,162 | 6,613 | 29.8% |
| CY 2013 | 22,698 | 6,175 | 27.2% |
| CY 2014 | 25,456 | 6,878 | 27.0% |
| CY 2015 | 26,795 | 7,324 | 27.3% |

*The study population for CY 2011 through CY 2015 included all qualifying pregnant women in Maryland’s Medical Assistance program, including FFS and HealthChoice MCO enrollees. The following coverage groups were excluded from the analysis: S09, X02, W01, and P10.

Mental Health Services

HealthChoice participants in need of mental health services are referred to Maryland’s Public Behavioral Health System,²⁹ but they continue to receive medically necessary somatic care through their MCOs. Mental health services are funded through the FFS Maryland Behavioral Health Administration using an ASO, Beacon Health Options (formerly ValueOptions).

Table 22 displays the key demographic characteristics of HealthChoice participants with a diagnosis of an MHD.³⁰ Black and White participants made up the majority of participants with an MHD. The percentage of participants with an MHD who were Black decreased across the measurement period from 49.9 percent in CY 2011 to 45.9 percent in CY 2015. In each year of the evaluation period, the majority of participants with an MHD were female. Since CY 2011, the percentage of participants with an MHD residing in Baltimore City gradually declined, with corresponding increases in the Baltimore and Washington Suburban regions. These changes are likely due to shifts in the population. By CY 2015, the majority of participants with an MHD lived in the Baltimore Suburban region. In CY 2011, children and adults made up 50.3 percent and 49.7 percent, respectively, of participants with an MHD. The proportion of adults rose to 60.4 percent in CY 2014 and 60.6 percent in CY 2015. These increases can be attributed to the large influx of adults due to the ACA expansion.

²⁹ Previously known as the Public Mental Health system; the name was changed with the addition of substance use disorder services to the carve-out in CY 2015.

³⁰ Individuals are identified as having an MHD if they have any ICD-10 diagnosis codes that begin with F200-203, F205, F2081, F2089, F209, F21-24, F250, F251, F258, F259, F28-29, F301-304, F308-325, F328-334, F338-341, F348-349, F39-45, F48, F50, F53-54, F60, F63-66, F68-69, F843, F900-902, F908-913, F918-919, F930, F938-942, F948-949, F980-981, F984, F9888-989, F99, G21, G24-25, R45, O99, Z046; OR any ICD-9 diagnosis codes that begin with 295-302, 307-309, 311- 314, 332.1, 333.90, 333.99, 648 according to the COMAR definition of MHD.



Table 22. Demographic Characteristics of HealthChoice Participants with an MHD, CY 2011–CY 2015

| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|----------------------------|----------------|----------------|----------------|----------------|----------------|
| Demographic Characteristic | % of Total |
| Race | | | | | |
| Asian | 0.8% | 0.9% | 1.0% | 1.1% | 1.1% |
| Black | 49.9% | 49.7% | 49.3% | 46.5% | 45.9% |
| White | 41.0% | 40.6% | 40.4% | 42.6% | 41.9% |
| Hispanic | 4.5% | 4.7% | 5.0% | 4.5% | 4.7% |
| Other | 3.7% | 4.0% | 4.3% | 5.4% | 6.3% |
| Total | 100% | 100% | 100% | 100% | 100% |
| Sex | | | | | |
| Female | 55.5% | 56.2% | 56.2% | 54.4% | 54.4% |
| Male | 44.5% | 43.8% | 43.8% | 45.6% | 45.6% |
| Total | 100% | 100% | 100% | 100% | 100% |
| Region | | | | | |
| Baltimore City | 30.4% | 29.6% | 28.3% | 27.8% | 27.4% |
| Baltimore Suburban | 27.6% | 28.3% | 29.1% | 29.7% | 29.9% |
| Eastern Shore | 11.7% | 11.7% | 11.8% | 11.3% | 11.2% |
| Southern Maryland | 4.3% | 4.3% | 4.5% | 4.6% | 4.6% |
| Washington Suburban | 15.3% | 15.3% | 15.5% | 15.9% | 16.4% |
| Western Maryland | 10.4% | 10.6% | 10.5% | 10.5% | 10.3% |
| Out of State | 0.3% | 0.3% | 0.3% | 0.2% | 0.1% |
| Total | 100% | 100% | 100% | 100% | 100% |
| Age Group (Years) | | | | | |
| 0-18 | 50.3% | 50.4% | 50.6% | 39.6% | 39.4% |
| 19-64 | 49.7% | 49.7% | 49.4% | 60.4% | 60.6% |
| Total | 100% | 100% | 100% | 100% | 100% |
| Total Participants | 103,226 | 109,578 | 113,393 | 153,775 | 169,672 |

The Department monitors the extent to which participants with an MHD access ambulatory care services. An ambulatory care visit is defined as a contact with a doctor or nurse practitioner in a clinic, physician’s office, or hospital outpatient department for a somatic concern, as well as visits related to MHDs and SUDs identified through MCO encounters and FFS claims data. In CY 2015, 92.5 percent of all participants with an MHD—which includes participants diagnosed with only an MHD and those with a co-occurring MHD and SUD—visited a health care provider for an ambulatory care visit (Table 23). Across the measurement period, the ambulatory care visit rate among all participants with an MHD increased from CY 2011 to CY 2013 but



decreased slightly in CY 2014 and CY 2015. This decrease is likely influenced by the influx of new ACA participants in CY 2014. Overall, participants who are enrolled in an ACA expansion coverage group have a lower rate of ambulatory care utilization compared to participants enrolled in other coverage groups.

In each year of the evaluation period, participants with a co-occurring MHD and SUD had a similar rate of ambulatory care utilization compared to participants with only an MHD. In CY 2015, the ambulatory care visit rate among those with an MHD and an SUD was 91.3 percent compared to 92.7 percent for those with only an MHD.

Table 23. HealthChoice Participants who Received an Ambulatory Care Visit by MHD Status, CY 2011–CY 2015

| Year | Total Number of Participants | At least One Ambulatory Care Visit (MCO + FFS) | |
|------------------|------------------------------|--|----------------------------------|
| | | Number of Participants | Percentage of Total Participants |
| MHD Only | | | |
| CY 2011 | 91,057 | 80,849 | 88.8% |
| CY 2012 | 97,015 | 86,450 | 89.1% |
| CY 2013 | 100,623 | 94,087 | 93.5% |
| CY 2014 | 129,901 | 121,145 | 93.3% |
| CY 2015 | 143,482 | 132,984 | 92.7% |
| MHD + SUD | | | |
| CY 2011 | 12,179 | 10,749 | 88.3% |
| CY 2012 | 12,563 | 11,165 | 88.9% |
| CY 2013 | 12,770 | 12,010 | 94.0% |
| CY 2014 | 23,874 | 21,936 | 91.9% |
| CY 2015 | 26,190 | 23,922 | 91.3% |
| All | | | |
| CY 2011 | 103,236 | 91,598 | 88.7% |
| CY 2012 | 109,578 | 97,615 | 89.1% |
| CY 2013 | 113,393 | 106,097 | 93.6% |
| CY 2014 | 153,775 | 143,081 | 93.0% |
| CY 2015 | 169,672 | 156,906 | 92.5% |

Table 24 displays the number and percentage of all participants with an MHD who had at least one ED visit covered by MCOs and the FFS system. This measure excludes ED visits that resulted in an inpatient hospital admission. See Appendix G for MCO-only ED visit rates. Overall, the percentage of participants with an MHD diagnosis only and an ED visit dropped from 47.7 percent in CY 2011 to 44.6 percent in CY 2015. In each year of the evaluation period, participants with a co-occurring MHD and SUD had a higher rate of ED utilization compared to



participants with an MHD only diagnosis. In CY 2015, the percentage of participants with an MHD and an SUD who visited the ED was 68.7 percent compared to 44.6 percent among those with only an MHD (without a co-occurring SUD diagnosis).

Table 24. HealthChoice Participants who Received an ED Visit by MHD Status, CY 2011–CY 2015

| Year | Total Number of Participants | At least One Outpatient ED Visit (MCO + FFS) | |
|------------------|------------------------------|--|----------------------------------|
| | | Number of Participants | Percentage of Total Participants |
| MHD Only | | | |
| CY 2011 | 91,057 | 43,429 | 47.7% |
| CY 2012 | 97,015 | 46,115 | 47.5% |
| CY 2013 | 100,623 | 47,036 | 46.7% |
| CY 2014 | 129,901 | 60,657 | 46.7% |
| CY 2015 | 143,482 | 63,979 | 44.6% |
| MHD + SUD | | | |
| CY 2011 | 12,179 | 8,894 | 73.0% |
| CY 2012 | 12,563 | 9,066 | 72.2% |
| CY 2013 | 12,770 | 9,157 | 71.7% |
| CY 2014 | 23,874 | 16,720 | 70.0% |
| CY 2015 | 26,190 | 17,992 | 68.7% |
| All | | | |
| CY 2011 | 103,236 | 52,323 | 50.7% |
| CY 2012 | 109,578 | 55,181 | 50.4% |
| CY 2013 | 113,393 | 56,193 | 49.6% |
| CY 2014 | 153,775 | 77,377 | 50.3% |
| CY 2015 | 169,672 | 81,971 | 48.3% |

Substance Use Disorder Services

SUD services were provided under the HealthChoice MCO benefit package during the first four years of the measurement period.³¹ In CY 2015, those services were “carved-out” to join MHD services in the FFS public behavioral health system managed by Beacon Health Options.

³¹ Individuals were identified as having an SUD if they had a claim that met the COMAR 10.09.70.02 definition of SUD, which includes presence of one of the following: (ICD-10 diagnosis codes: F10-19, O99310-99315, O99320-99325, R780-785; OR ICD-9 diagnosis codes: 291-292, 303-304, 305.0, 305.2-305.9), 648.3; WITH (Revenue codes 0114, 0116, 0124, 0126, 0134, 0136, 0154, 0156, 0762, 0900, 0905-0906, 0911-0916, 0918-0919, 0944-0945, 0450-0452, 0456, 0459 OR Procedure codes 99.201-99.205, 99.211-99.215, J8499, J2315);



Table 25 presents the demographic characteristics of HealthChoice participants with a diagnosis of an SUD. The ACA expansion resulted in significant shifts in the demographic characteristics of the HealthChoice population as a whole during the measurement period. As more Whites enrolled in HealthChoice, participants with an SUD who were Black decreased from 45.3 percent in CY 2011 to 39.7 percent in CY 2015. The percentage of participants with an SUD who are Black declined from 45.3 percent in CY 2011 to 39.7 percent in CY 2015. A similar shift affected the gender distribution of HealthChoice participants with an SUD. Females made up the majority of participants diagnosed with an SUD from CY 2011 to CY 2013. In CY 2014 and CY 2015, the majority of participants with an SUD were male.

In each year of the measurement period, more than half of participants with an SUD resided in Baltimore City and the surrounding Baltimore Suburban area. By CY 2015, 62.3 percent of participants with an SUD lived in these regions compared to 56.7 percent in CY 2011. A large majority of participants with an SUD were adults aged 19 to 64 years. The growth in the adult HealthChoice population as a result of the ACA expansion further increased the percentage of adults with an SUD compared to children aged 0 to 18. By CY 2015, 93.4 percent of participants with an SUD were adults—a 17.4 percentage point increase from CY 2011.

Table 25. Demographic Characteristics of HealthChoice Participants with an SUD, CY 2011–CY 2015

| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|-----------------------|-------------|-------------|-------------|-------------|-------------|
| | % of Total |
| Race/Ethnicity | | | | | |
| Asian | 0.5% | 0.5% | 0.5% | 0.6% | 0.5% |
| Black | 45.3% | 45.2% | 43.6% | 41.6% | 39.7% |
| White | 45.4% | 43.6% | 46.6% | 51.3% | 52.6% |
| Hispanic | 5.4% | 6.7% | 5.3% | 2.2% | 2.0% |
| Other | 3.4% | 4.0% | 4.0% | 4.3% | 5.1% |
| Total | 100% | 100% | 100% | 100% | 100% |
| Sex | | | | | |
| Female | 55.7% | 55.9% | 56.9% | 44.6% | 44.1% |
| Male | 44.3% | 44.1% | 43.1% | 55.4% | 55.9% |
| Total | 100% | 100% | 100% | 100% | 100% |
| Region | | | | | |
| Baltimore City | 32.7% | 30.6% | 31.3% | 34.1% | 32.6% |

HCPCS H0001, H0004, H0005, H0014-H0016, H0020, H0047, H2036, J8499
 -Revenue code of “0100” and a provider type of “55.”



| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---------------------------|---------------|---------------|---------------|---------------|---------------|
| | % of Total |
| Baltimore Suburban | 24.0% | 23.1% | 25.7% | 28.9% | 29.7% |
| Eastern Shore | 11.3% | 10.8% | 11.2% | 11.3% | 12.1% |
| Southern Maryland | 5.5% | 5.1% | 5.5% | 5.2% | 5.1% |
| Washington Suburban | 17.4% | 21.1% | 16.6% | 10.3% | 9.9% |
| Western Maryland | 9.0% | 9.2% | 9.5% | 10.0% | 10.5% |
| Out of State | 0.2% | 0.2% | 0.2% | 0.2% | 0.1% |
| Total | 100% | 100% | 100% | 100% | 100% |
| Age Group (Years) | | | | | |
| 0-18 | 24.0% | 27.4% | 21.8% | 8.2% | 6.6% |
| 19-64 | 76.0% | 72.6% | 78.2% | 91.8% | 93.4% |
| Total | 100% | 100% | 100% | 100% | 100% |
| Total Participants | 30,506 | 33,056 | 32,345 | 58,229 | 59,959 |

The Department also monitors the extent to which Medicaid participants with an SUD access ambulatory care services. Table 26 displays the percentage of HealthChoice participants with an SUD who received an ambulatory care visit. This measure includes ambulatory care visits related to MHDs and SUDs identified through MCO encounters and FFS claims data.

Across the measurement period, there was a decrease in ambulatory care utilization by participants with an SUD. The percentage of participants with any SUD diagnosis—which includes participants diagnosed with only an SUD and those with a co-occurring MHD and SUD—who had at least one ambulatory care visit decreased from 84.5 percent in CY 2011 to 80.0 percent in CY 2015. As noted above, treatments for SUDs were included as part of the MCO benefit package until the end of CY 2014. Participants with a co-occurring MHD and SUD were consistently more likely to complete an ambulatory care visit compared to participants with only an SUD diagnosis. The rate of ambulatory care utilization among participants with a co-occurring MHD and SUD increased from 88.3 percent in CY 2011 to 91.3 percent in CY 2015.

Table 26. HealthChoice Participants who Received an Ambulatory Care Visit by SUD Status, CY 2011–CY 2015

| Year | Number of Participants | At least One Ambulatory Care Visit (MCO + FFS) | |
|-----------------|------------------------|--|----------------------------------|
| | | Number of Participants | Percentage of Total Participants |
| SUD Only | | | |
| CY 2011 | 18,327 | 15,019 | 82.0% |
| CY 2012 | 20,493 | 16,920 | 82.6% |
| CY 2013 | 19,575 | 15,984 | 81.7% |
| CY 2014 | 34,355 | 24,893 | 72.5% |



| Year | Number of Participants | At least One Ambulatory Care Visit (MCO + FFS) | |
|------------------|------------------------|--|----------------------------------|
| | | Number of Participants | Percentage of Total Participants |
| CY 2015 | 33,769 | 24,053 | 71.2% |
| MHD + SUD | | | |
| CY 2011 | 12,179 | 10,749 | 88.3% |
| CY 2012 | 12,563 | 11,165 | 88.9% |
| CY 2013 | 12,770 | 12,010 | 94.0% |
| CY 2014 | 23,874 | 21,936 | 91.9% |
| CY 2015 | 26,190 | 23,922 | 91.3% |
| All | | | |
| CY 2011 | 30,506 | 25,768 | 84.5% |
| CY 2012 | 33,056 | 28,085 | 85.0% |
| CY 2013 | 32,345 | 27,994 | 86.5% |
| CY 2014 | 58,229 | 46,829 | 80.4% |
| CY 2015 | 59,959 | 47,975 | 80.0% |

Table 27 displays the percentage of HealthChoice participants with an SUD who had at least one ED visit covered by MCOs and the FFS system. This measure excludes ED visits that resulted in an inpatient hospital admission. See Appendix G for MCO-only ED visit rates. Overall, the rate of ED utilization remained fairly stable from CY 2011 through CY 2013; however, a decrease was observed in CY 2014 and CY 2015. There was an increase in the number of participants as a result of the ACA expansion in CY 2014.

Table 27. HealthChoice Participants who Received an ED Visit by SUD Status, CY 2011–CY 2015

| Year | Total Number of Participants | At least One Outpatient ED Visit (MCO + FFS) | |
|------------------|------------------------------|--|----------------------------------|
| | | Number of Participants | Percentage of Total Participants |
| SUD Only | | | |
| CY 2011 | 18,327 | 11,387 | 62.1% |
| CY 2012 | 20,493 | 13,116 | 64.0% |
| CY 2013 | 19,575 | 12,130 | 62.0% |
| CY 2014 | 34,355 | 18,287 | 53.2% |
| CY 2015 | 33,769 | 17,397 | 51.5% |
| MHD + SUD | | | |
| CY 2011 | 12,179 | 8,894 | 73.0% |
| CY 2012 | 12,563 | 9,066 | 72.2% |
| CY 2013 | 12,770 | 9,157 | 71.7% |



| Year | Total Number of Participants | At least One Outpatient ED Visit (MCO + FFS) | |
|------------|------------------------------|--|----------------------------------|
| | | Number of Participants | Percentage of Total Participants |
| CY 2014 | 23,874 | 16,720 | 70.0% |
| CY 2015 | 26,190 | 17,992 | 68.7% |
| All | | | |
| CY 2011 | 30,506 | 20,281 | 66.5% |
| CY 2012 | 33,056 | 22,182 | 67.1% |
| CY 2013 | 32,345 | 21,287 | 65.8% |
| CY 2014 | 58,229 | 35,007 | 60.1% |
| CY 2015 | 59,959 | 35,389 | 59.0% |

Table 28 presents the number and percentage of HealthChoice participants with an SUD who received at least one methadone replacement therapy and medication assisted treatment (MAT).³² The percentage of all participants with an SUD who received at least one methadone replacement therapy consistently increased across the measurement period, from 28.5 percent in CY 2011 to 38.0 percent in CY 2015. The largest increase in utilization was observed between CY 2013 and CY 2014. This increase may be attributed to providing services to the ACA expansion population. A similar pattern of results can be seen for all participants with an SUD who received at least one MAT. Among this group, the percentage of participants who received at least one MAT increased by 15.8 percentage points, from 38.8 percent in CY 2011 to 54.6 percent in CY 2015.

Table 28. Number and Percentage of HealthChoice Participants who Received a Methadone Replacement Therapy or MAT, by SUD Status, CY 2011–CY 2015

| Year | Total Number of Participants | At least One Methadone Replacement Therapy | | At least One MAT | |
|------------------|------------------------------|--|----------------------------------|------------------------|----------------------------------|
| | | Number of Participants | Percentage of Total Participants | Number of Participants | Percentage of Total Participants |
| SUD Only | | | | | |
| CY 2011 | 18,327 | 5,095 | 27.8% | 6,387 | 34.9% |
| CY 2012 | 20,493 | 5,440 | 26.5% | 6,992 | 34.1% |
| CY 2013 | 19,575 | 6,120 | 31.3% | 7,891 | 40.3% |
| CY 2014 | 34,355 | 12,957 | 37.7% | 16,763 | 48.8% |
| CY 2015 | 33,769 | 13,946 | 41.3% | 18,301 | 54.2% |
| MHD + SUD | | | | | |
| CY 2011 | 12,179 | 3,606 | 29.6% | 5,445 | 44.7% |

³² MAT was defined as any treatment with buprenorphine, naloxone, methadone, or naltrexone.



| Year | Total Number of Participants | At least One Methadone Replacement Therapy | | At least One MAT | |
|------------|------------------------------|--|----------------------------------|------------------------|----------------------------------|
| | | Number of Participants | Percentage of Total Participants | Number of Participants | Percentage of Total Participants |
| CY 2012 | 12,563 | 3,985 | 31.7% | 5,932 | 47.2% |
| CY 2013 | 12,770 | 4,192 | 32.8% | 6,383 | 50.0% |
| CY 2014 | 23,874 | 7,781 | 32.6% | 12,467 | 52.2% |
| CY 2015 | 26,190 | 8,852 | 33.8% | 14,410 | 55.0% |
| All | | | | | |
| CY 2011 | 30,506 | 8,701 | 28.5% | 11,832 | 38.8% |
| CY 2012 | 33,056 | 9,425 | 28.5% | 12,924 | 39.1% |
| CY 2013 | 32,345 | 10,312 | 31.9% | 14,274 | 44.1% |
| CY 2014 | 58,229 | 20,738 | 35.6% | 29,230 | 50.2% |
| CY 2015 | 59,959 | 22,798 | 38.0% | 32,711 | 54.6% |

Behavioral Health Integration

Table 29 presents the number and percentage of HealthChoice participants by behavioral health diagnosis group. These groups are a dual diagnosis of MHD and SUD, MHD only, SUD only, or none of these diagnoses. Overall, the percentage of HealthChoice participants without a behavioral health condition decreased from 86.4 percent in CY 2011 to 84.4 percent in CY 2015. The corresponding percentage of the HealthChoice population with a co-occurring MHD and SUD, MHD only, and an SUD only increased from CY 2011 to CY 2015. The largest percentage point increase was observed among participants with an MHD only. The percentage of participants within this diagnostic category increased from 10.1 percent in CY 2011 to 11.0 percent in CY 2015.

Table 29. Number and Percentage of HealthChoice Participants with a Behavioral Health Diagnosis by Diagnosis, CY 2011–CY 2015

| Diagnosis | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|--------------|---------------------------|---------------------------|---------------------------|-----------------------------|-----------------------------|
| MHD + SUD | 12,179 (1.4%) | 12,563 (1.4%) | 12,770 (1.3%) | 23,874 (1.9%) | 26,190 (2.0%) |
| MHD Only | 91,057 (10.1%) | 97,015 (10.4%) | 100,623 (10.5%) | 129,901 (10.4%) | 143,482 (11.0%) |
| SUD Only | 18,327 (2.1%) | 20,493 (2.2%) | 19,575 (2.0%) | 34,355 (2.7%) | 33,769 (2.6%) |
| None | 771,215 (86.4%) | 800,253 (86.0%) | 829,445 (86.2%) | 1,062,735 (85.0%) | 1,101,051 (84.4%) |
| Total | 892,778 (100%) | 930,324 (100%) | 962,413 (100%) | 1,250,865 (100%) | 1,304,492 (100%) |



Access to Care for Children in Foster Care

This section of the report examines service utilization for children in foster care with any period of enrollment in HealthChoice during the calendar year.³³ This section also compares service utilization for children in foster care with other HealthChoice children. Unless otherwise specified, the measures presented are for foster care children aged 0 through 21 years and include their use of FFS and MCO services.

Table 30 displays HealthChoice children enrolled in foster care by age group for CY 2011 and CY 2015. Across the evaluation period, children aged 10 through 21 years made up the largest proportion of children in foster care who are enrolled in HealthChoice (69.2 percent in CY 2011 and 65.5 percent in CY 2015).

Table 30. HealthChoice Children in Foster Care by Age Group, CY 2011 and CY 2015

| Age Group (Years) | CY 2011 | | CY 2015 | |
|-------------------|------------------------|----------------------------------|------------------------|----------------------------------|
| | Number of Participants | Percentage of Total Participants | Number of Participants | Percentage of Total Participants |
| 0 to <1 | 271 | 2.5% | 230 | 2.7% |
| 1–2 | 729 | 6.6% | 698 | 8.1% |
| 3–5 | 1,117 | 10.2% | 832 | 9.7% |
| 6–9 | 1,262 | 11.5% | 1,202 | 14.0% |
| 10–14 | 2,122 | 19.3% | 1,673 | 19.5% |
| 15–18 | 2,917 | 26.5% | 2,152 | 25.1% |
| 19–21 | 2,570 | 23.4% | 1,789 | 20.9% |
| Total | 10,988 | 100.0% | 8,576 | 100% |

Figure 11 displays the percentage of children in foster care who had at least one ambulatory care visit in CY 2011 and CY 2015 by age group. From CY 2011 to CY 2015, the overall rate of ambulatory care visits increased by 2.1 percentage points. As observed across the general HealthChoice population, younger children in foster care were more likely than older children to receive ambulatory care services.

³³ Children in the subsidized adoption program are not *included as* foster children.



Figure 11. Percentage of HealthChoice Children in Foster Care who Received an Ambulatory Care Visit by Age Group, CY 2011 and CY 2015

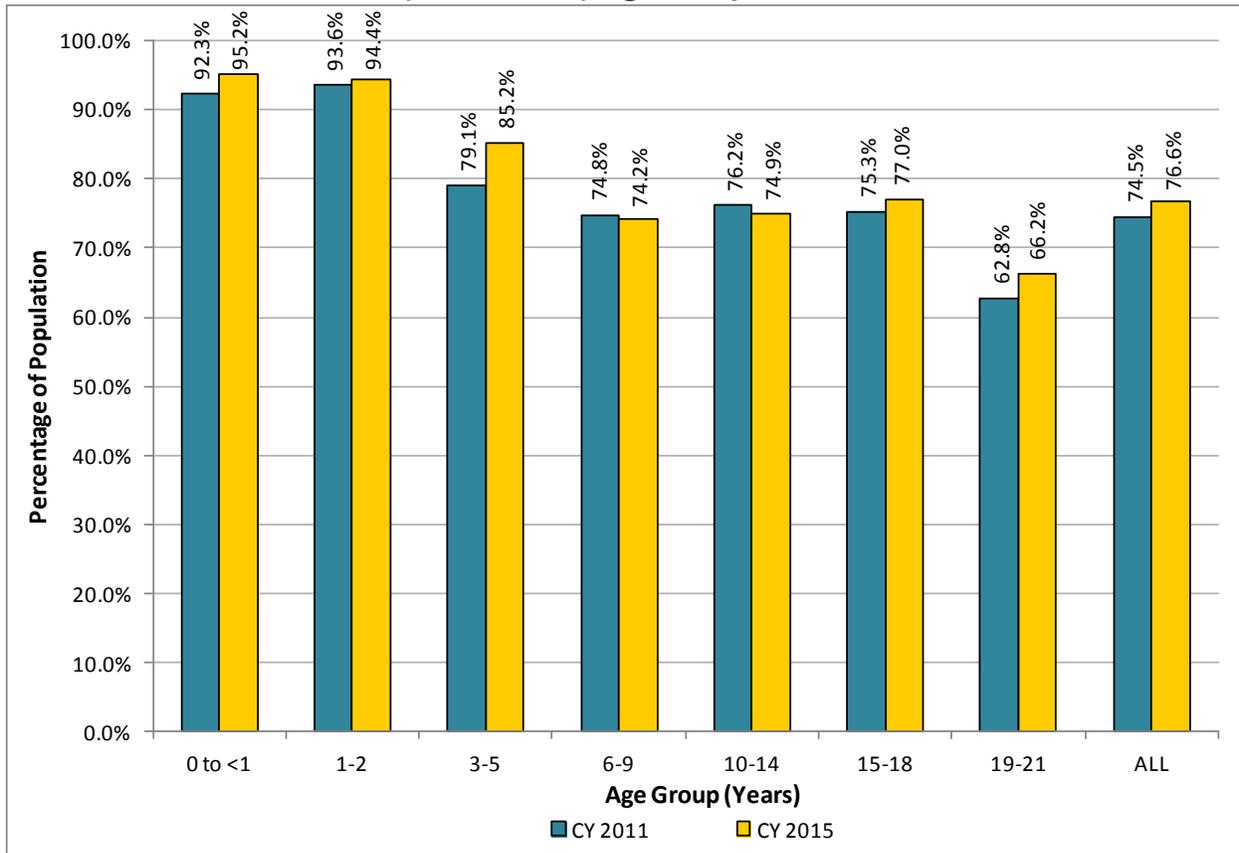


Figure 12 compares the ambulatory care visit rate for children in foster care with the rate for other children enrolled in HealthChoice in CY 2015. Overall, children in foster care accessed ambulatory care at a slightly lower rate than other children in HealthChoice. However, children in foster care in several age categories accessed ambulatory care services at a higher rate than other children in the HealthChoice program.



Figure 12. Percentage of HealthChoice Children in Foster Care vs. Other HealthChoice Children who Received an Ambulatory Care Visit by Age Group, CY 2015

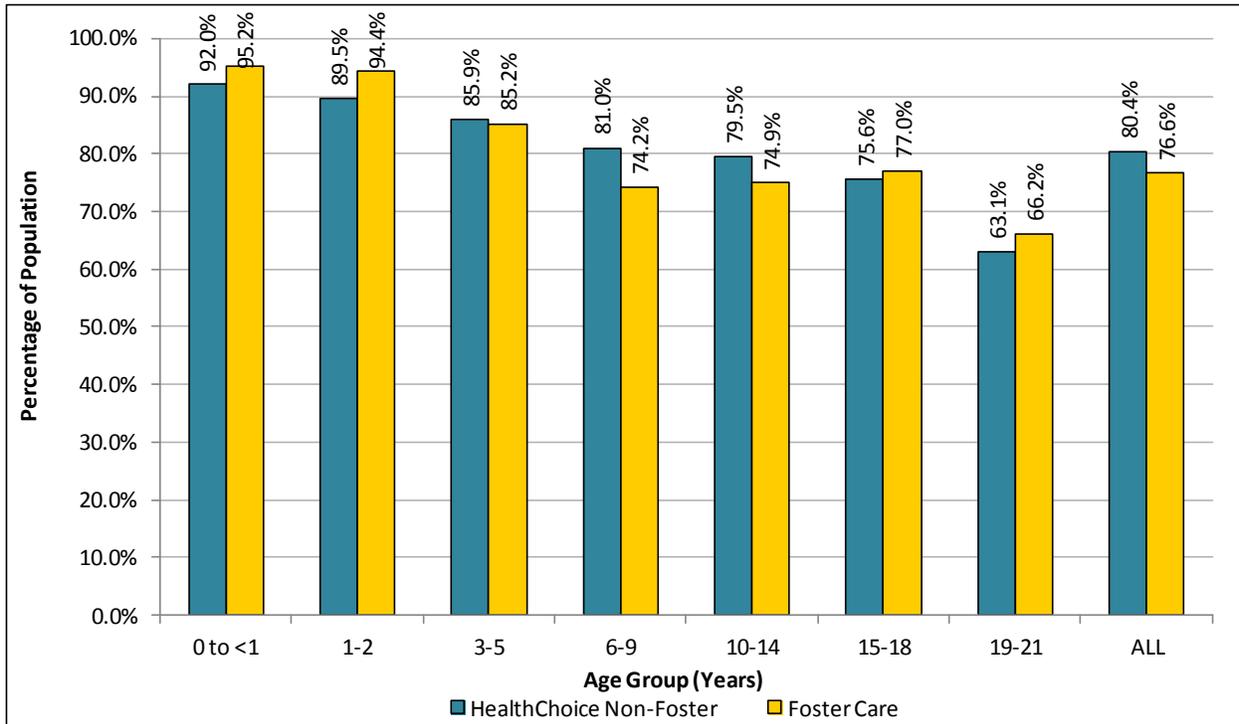


Figure 13 displays the percentage of children in foster care who received at least one MCO or FFS outpatient ED visit in CY 2011 and CY 2015 by age group.³⁴ The overall rate decreased by 2.0 percentage points during the evaluation period. Children aged 1 to 2 years and 19 to 21 years had the highest rates of ED utilization in CY 2015. Children younger than 1 year experienced an increase of 2.1 percentage points in ED utilization during the evaluation period, while children aged 1 to 2 years experienced a decrease of 4.9 percentage points. Due to the small number of children within these two age groups, these results should be interpreted with caution.

³⁴ Outpatient ED visits include ED visits paid through the MCO or FFS system that were seen and discharged on an outpatient basis. This measure does not include ED visits that lead to an inpatient admission.



Figure 13. Percentage of HealthChoice Children in Foster Care who Received an ED Visit by Age Group, CY 2011 and CY 2015

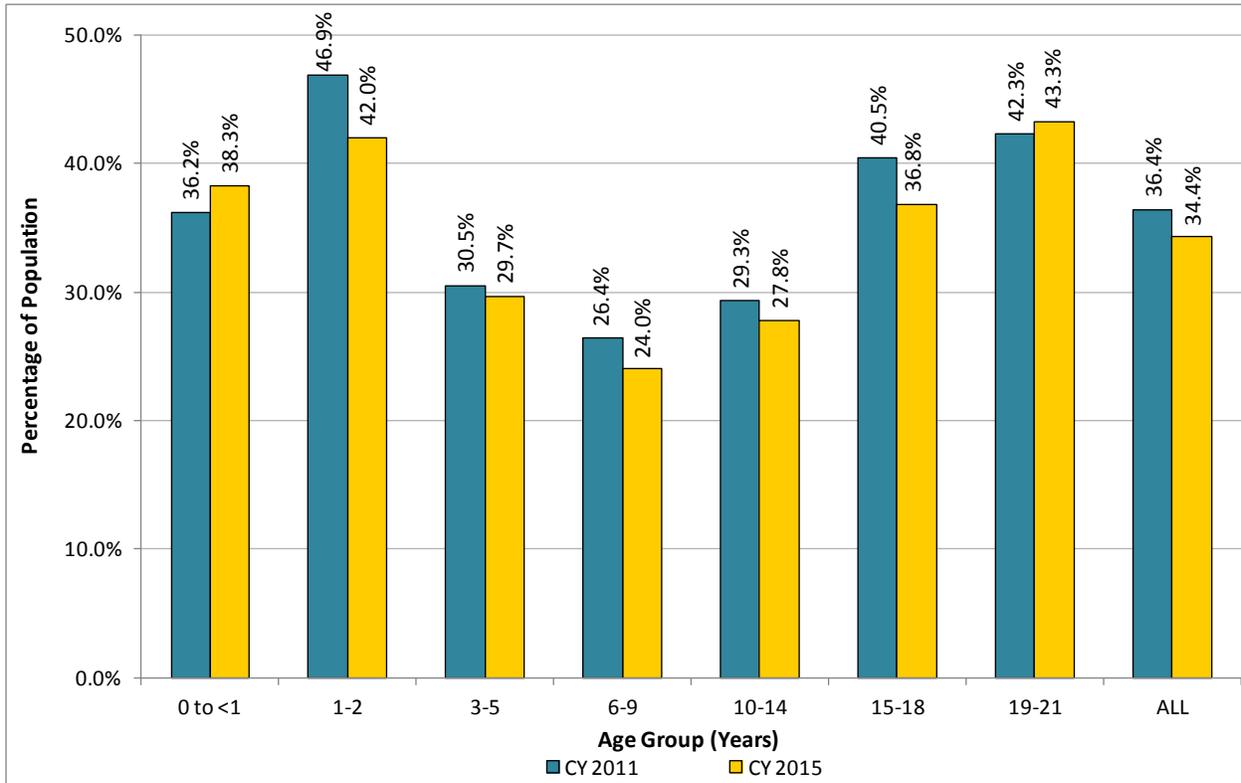


Figure 14 compares the MCO and FFS outpatient ED visit rate in CY 2015 for children in foster care to the rate for other children enrolled in HealthChoice. Despite the decrease in ED utilization among children in foster care from CY 2011 to CY 2015 (as referenced in Figure 13), children in foster care accessed the ED at a higher rate than other children in the HealthChoice program.



Figure 14. Percentage of HealthChoice Children in Foster Care vs. Other HealthChoice Children who Received an ED Visit by Age Group, CY 2015

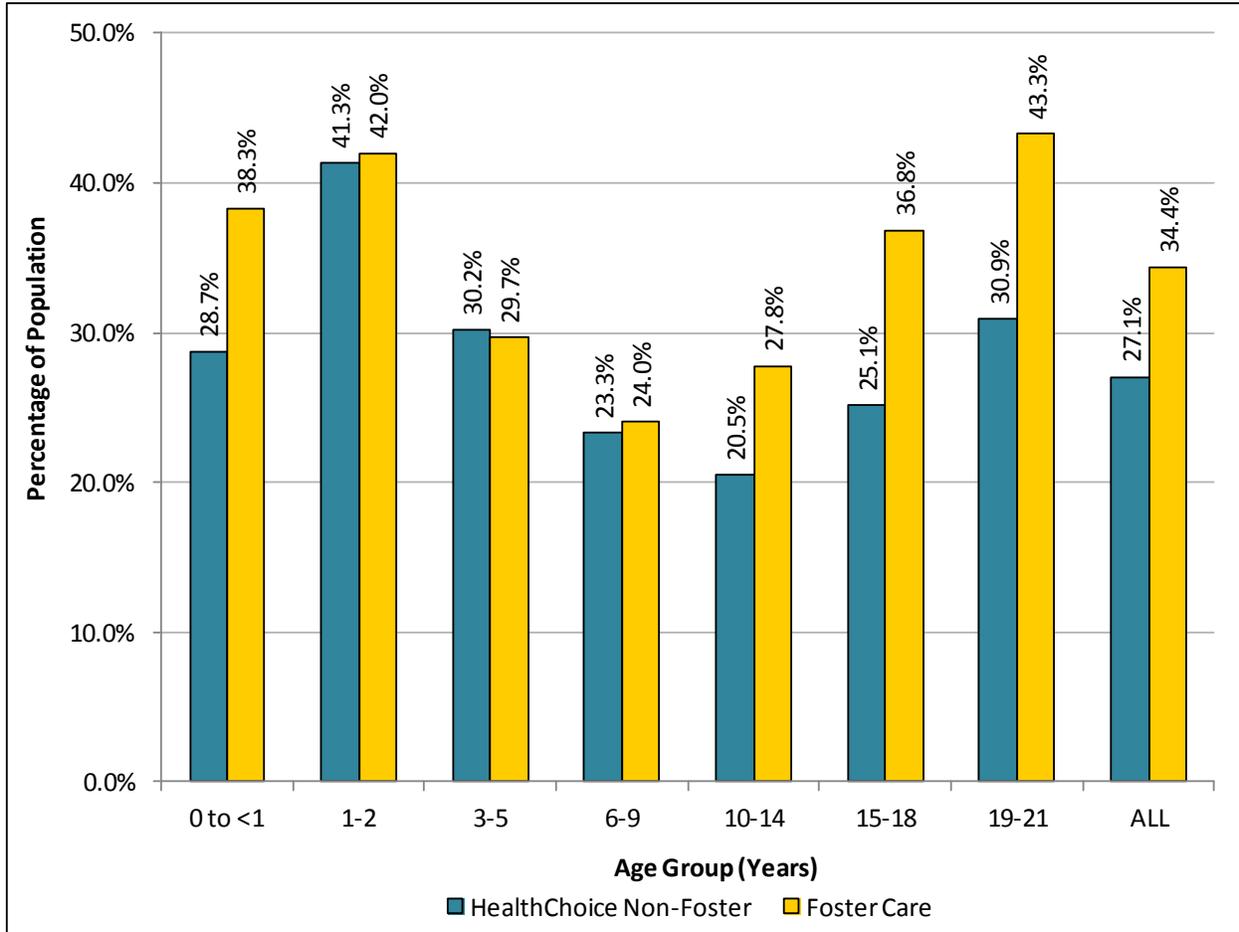
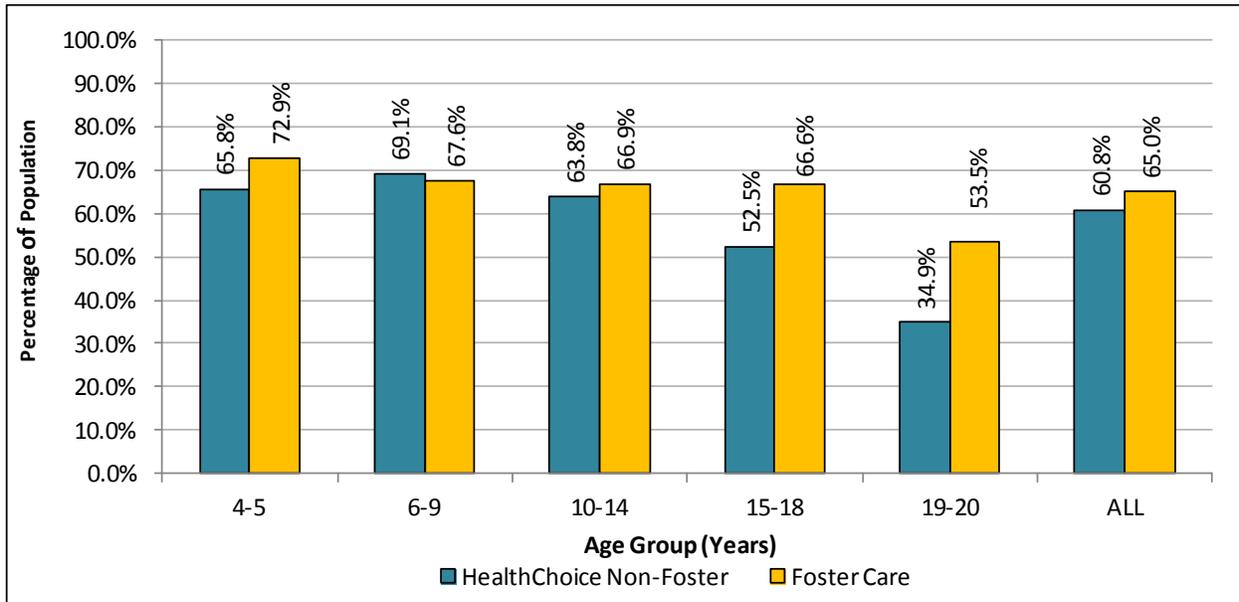


Figure 15 compares the dental utilization rate in CY 2015 for foster care children aged 4 to 20 years enrolled in HealthChoice to the rate for other children in HealthChoice. Overall, children in foster care had a higher dental visit rate (65.0 percent) than other HealthChoice children (60.8 percent). The largest differences between the two populations were observed in the older age groups. The dental visit rate was 53.5 percent for children in foster care aged 19 to 20 years and 34.9 percent for other HealthChoice children—a difference of 18.6 percentage points. Among children aged 15 to 18 years, those in foster care had a dental visit rate that was 14.1 percentage points higher than other HealthChoice participants.



Figure 15. Percentage of HealthChoice Children Aged 4–20 Years in Foster Care vs. Other HealthChoice Children who Received a Dental Visit, by Age Group, CY 2015



Maternal Health

This section of the report focuses on the maternal health services provided under HealthChoice. The Department and the HealthChoice MCOs engage pregnant women in care through individualized outreach, community events, and prenatal case management. HealthChoice enrollees identified as pregnant receive informational materials on how to access care, the dental benefit for pregnant women, and other resources, such as the Text4Baby program.³⁵ The Department also operates a dedicated help line for pregnant women. Women who contact the help line are referred to Medicaid-funded Administrative Care Coordination Units (ACCUs) at the local health departments. The ACCUs connect HealthChoice participants to both their MCO and other services, such as dental services and local home-visiting programs.

Timeliness of Prenatal Care

HEDIS measures the timeliness of prenatal care and the frequency of ongoing prenatal care to determine the adequacy of care for pregnant women. The earlier a woman receives prenatal care, the more likely it is to identify and manage health conditions that could affect her health or the health of the newborn.

³⁵ Information on Text4Baby is available online at <https://www.text4baby.org/>.



The HEDIS timeliness of prenatal care measure assesses the percentage of deliveries for which the mother received a prenatal care visit in the first trimester *or* within 42 days of HealthChoice enrollment. Table 31 presents HealthChoice performance on this measure for CY 2011 through CY 2015 (HealthcareData Company, LLC, 2016). Timeliness of prenatal care decreased by 1.9 percentage points during the evaluation period, from 86.3 percent in CY 2011 to 84.4 percent in CY 2015. For the first two years of the evaluation period, HealthChoice outperformed the national HEDIS mean, but in CY 2013, the HealthChoice rate dropped below the national rate. This decline is explained in part by the inclusion of a new HealthChoice MCO with a score of 52.2 percent into the average rate calculation. Excluding the new MCO, the CY 2013 HealthChoice rate was 86.4 percent. For CY 2014, excluding the newer MCOs would have increased the HealthChoice rate to 84.1 percent. Even with the newer MCOs, the overall HealthChoice rate increased between CY 2013 and CY 2015 and was above the national HEDIS mean in CY 2014 and CY 2015.

Table 31. HEDIS Timeliness of Prenatal Care, HealthChoice Compared with the National HEDIS Mean, CY 2011–CY 2015*

| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|---|---------|---------|---------|---------|---------|
| Percentage of Deliveries in which the Mother Received a Prenatal Care Visit in the 1 st Trimester or within 42 days of HealthChoice Enrollment | 86.3% | 85.8% | 81.5% | 82.8% | 84.4% |
| National HEDIS Mean | + | + | - | + | + |

*The HealthChoice averages in CY 2013 and CY 2014 were impacted by the inclusion of HEDIS rates from newer MCOs into the calculation.

Frequency of Ongoing Prenatal Care

The frequency of ongoing prenatal care measure assesses the percentage of recommended prenatal visits received.³⁶ The Department uses this measure to assess MCO performance in providing appropriate prenatal care. The measure calculates the percentage of deliveries that received the expected number of prenatal visits. This measure accounts for gestational age and time of enrollment, and women must be continuously enrolled 43 days prior to and 56 days after delivery.

The first aspect of this measure assesses the percentage of women who received more than 80 percent of expected visits; therefore, a higher score is preferable. Table 32 shows that this rate decreased by 6.5 percentage points during the evaluation period, from 74.4 percent in CY 2011 to 67.9 percent in CY 2015 (HealthcareData Company, LLC, 2016). The second aspect of this

³⁶ The American College of Obstetricians and Gynecologists recommends a visit once every 4 weeks during the first 28 weeks of pregnancy, once every 2 to 3 weeks during the next 7 weeks, and weekly for the remainder of the pregnancy, for a total of about 13 to 15 visits.



measure assesses the percentage of women who received less than 21 percent of expected visits; therefore, a lower score is preferable. The rate for this measure increased by 1.2 percentage points, from 4.9 percent in CY 2011 to 6.1 percent in CY 2015. In sum, Maryland consistently outperformed the national HEDIS means for both aspects of this measure, although performance over the evaluation period declined. Performance on both aspects of the measure greatly improved between CY 2014 and CY 2015, albeit not matching the performance of CY 2011. The Department is actively working with the lowest-performing MCO on improving its performance on this and other HEDIS measures.

Table 32. Percentage of HealthChoice Deliveries Receiving the Expected Number of Prenatal Visits (\geq 81 Percent or $<$ 21 Percent of Recommended Visits), Compared with the National HEDIS Mean, CY 2011–CY 2015*

| | CY 2011 | | CY 2012 | | CY 2013 | | CY 2014 | | CY 2015 | |
|--|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|
| | MD | National |
| Greater than or equal to 81% of Expected Prenatal Visits | 74.4% | + | 71.5% | + | 66.0% | + | 64.9% | + | 67.9% | + |
| Less than 21% of Expected Prenatal Visits** | 4.9% | + | 6.3% | + | 9.7% | + | 8.2% | + | 6.1% | + |

* The HealthChoice averages in CY 2014 were impacted by the inclusion of HEDIS rates from newer MCOs.

** A lower rate points to better performance. A "+" means that the rate is below the National HEDIS Mean.

The Family Planning Program

The Family Planning program provides family planning office visits to women who are not eligible for Medicaid. These services include physical examinations, certain laboratory services, family planning supplies, reproductive education, counseling and referral, and permanent sterilization services. Previously, the Family Planning program only enrolled postpartum women. Eligibility for the program, however, was expanded in 2012 to cover any women younger than 51 years of age—regardless of postpartum status—with household incomes below 200 percent of the FPL.

Tables 33 and 34 present the number of Medicaid participants in the Family Planning program and the percentage of Family Planning participants who received at least one service between CY 2011 and CY 2015.³⁷ These data are presented for women who were enrolled in Family Planning for any period of time during the calendar year and women who were enrolled continuously for 12 months.

³⁷ Only FFS claims were used in the analysis.



During the evaluation period, the number of women with any period of enrollment in the Family Planning program decreased by 6.2 percent, from 21,056 participants in CY 2011 to 19,754 participants in CY 2015 (Table 33). This decline in enrollment may be partially attributed to the ACA expansion, which provided full Medicaid coverage to all individuals (including parents) with income up to 138 percent of the FPL. This expansion increased the number of women who were eligible for full Medicaid after delivery.

Table 33 shows that the percentage of women with any period of enrollment in the program who utilized at least one family planning service ranged between 23.6 percent and 36.2 percent from CY 2011 to CY 2015. As Table 34 displays, the percentage of women enrolled in the program for the entire 12 months with at least one service decreased from 53.6 percent in CY 2011 to 22.3 percent in CY 2015.

Table 33. Percentage of Family Planning Participants (Any Period of Enrollment) who Received a Corresponding Service, CY 2011–CY 2015

| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|------------------------------------|---------|---------|---------|---------|---------|
| Number of Participants | 21,056 | 24,883 | 26,105 | 22,042 | 19,754 |
| Number with at least 1 Service | 5,282 | 9,019 | 8,954 | 6,305 | 4,671 |
| Percentage with at least 1 Service | 25.1% | 36.2% | 34.3% | 28.6% | 23.6% |

Table 34. Percentage of Family Planning Participants (12-Month Enrollment) who Received a Corresponding Service, CY 2011–CY 2015

| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
|------------------------------------|---------|---------|---------|---------|---------|
| Number of Participants | 1,736 | 2,520 | 4,147 | 6,032 | 7,488 |
| Number with at least 1 Service | 930 | 1,352 | 2,252 | 2,061 | 1,672 |
| Percentage with at least 1 Service | 53.6% | 53.7% | 54.3% | 34.2% | 22.3% |

Services for Individuals with HIV/AIDS

The Department continuously monitors service utilization for HealthChoice participants with HIV/AIDS. This section of the report presents the enrollment distribution of HealthChoice participants with HIV/AIDS by age group and race/ethnicity, as well as measures of ambulatory care service utilization, outpatient ED visits, CD4 testing, and viral load testing. CD4 testing is used to determine how well the immune system is functioning in individuals diagnosed with HIV. The viral load test monitors the progression of the HIV infection by measuring the level of immunodeficiency virus in the blood.

Table 35 presents the percentage of participants with HIV/AIDS by age group and race/ethnicity for CY 2011 and CY 2015. Across the evaluation period, the distribution of enrollees by age group has remained consistent. In CY 2015, Black and White participants composed 93.5 percent of the HIV/AIDS population.



Table 35. Distribution of HealthChoice Participants with HIV/AIDS by Age Group and Race/Ethnicity, CY 2011 and CY 2015

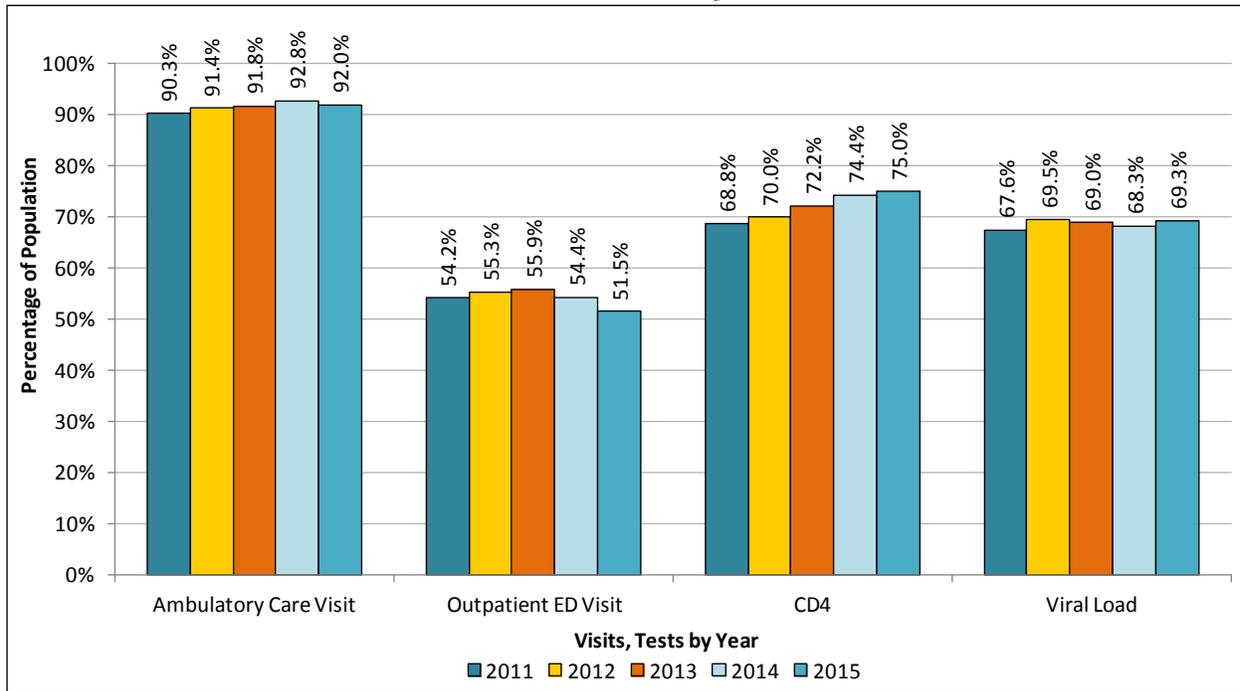
| Age Group (Years) | CY 2011 | | CY 2015 | |
|-------------------|------------------------|---------------------|------------------------|---------------------|
| | Number of Participants | Percentage of Total | Number of Participants | Percentage of Total |
| 0–18 | 295 | 5.4% | 240 | 3.7% |
| 19–39 | 1,502 | 27.7% | 1,884 | 28.9% |
| 40–64 | 3,630 | 66.9% | 4,402 | 67.5% |
| Total | 5,427 | 100% | 6,526 | 100% |
| Race/Ethnicity | Number of Participants | Percentage of Total | Number of Participants | Percentage of Total |
| Asian | 21 | 0.4% | 33 | 0.5% |
| Black | 4,622 | 85.2% | 5,465 | 83.7% |
| White | 559 | 10.3% | 637 | 9.8% |
| Hispanic | 60 | 1.1% | 91 | 1.4% |
| Other | 165 | 3.0% | 300 | 4.6% |
| Total | 5,427 | 100% | 6,526 | 100% |

Figure 16 shows service utilization by participants with HIV/AIDS from CY 2011 through CY 2015. Overall, the percentage of participants who received an ambulatory care visit covered through the MCO or FFS system increased by 1.7 percentage points during the evaluation period. The percentage of participants with an outpatient ED visit (MCO or FFS) increased by 1.7 percentage points from CY 2011 to CY 2013, and then decreased by 4.4 percentage points from CY 2013 to CY 2015. See Appendix H for MCO-only rates of ambulatory care visits and ED visits among HealthChoice participants with HIV/AIDS.

Figure 16 also presents the percentage of individuals with HIV/AIDS who received CD4 testing; this rate increased by 6.2 percentage points from CY 2011 to CY 2015. Finally, Figure 16 displays the percentage of individuals with HIV/AIDS who received viral load testing during the evaluation period. Overall, participants had an increase in utilization, from 67.6 percent in CY 2011 to 69.3 percent in CY 2015.



Figure 16. Percentage of HealthChoice Participants with HIV/AIDS who Received an Ambulatory Care Visit, ED Visit, CD4 Testing, and Viral Load Testing, CY 2011–CY 2015



REM Program

The REM program provides case management services to Medicaid participants who have one of a specified list of rare and expensive medical conditions and require sub-specialty care. To be enrolled in REM, an individual must be eligible for HealthChoice, have a qualifying diagnosis, and be within the age limit for that diagnosis. Examples of qualifying diagnoses include cystic fibrosis, quadriplegia, muscular dystrophy, chronic renal failure, and spina bifida. REM participants do not receive services through an MCO. The REM program provides the standard FFS Medicaid benefit package and some expanded benefits, such as medically necessary private duty nursing, shift home health aide, and adult dental services. This section of the report presents data on REM enrollment and service utilization.

REM Enrollment

Table 36 presents REM enrollment by age group and sex for CY 2011 and CY 2015. In both years, the majority of REM participants were male children aged 0 through 18 years. The gender distribution differs from the general HealthChoice population, which has a higher percentage of females (approximately 54.5 percent in CY 2015).



Table 36. REM Enrollment by Age Group and Sex, CY 2011 and CY 2015

| Age Group (Years) | CY 2011 | | CY 2015 | |
|-------------------|---------------------|---------------------|---------------------|---------------------|
| | Number of Enrollees | Percentage of Total | Number of Enrollees | Percentage of Total |
| 0-18 | 3,136 | 70.3% | 3,050 | 67.1% |
| 19 and over | 1,328 | 29.7% | 1,496 | 32.9% |
| Total | 4,464 | 100% | 4,546 | 100% |
| Sex/Gender | Number of Enrollees | Percentage of Total | Number of Enrollees | Percentage of Total |
| Female | 1,971 | 44.2% | 1,976 | 43.5% |
| Male | 2,493 | 55.8% | 2,570 | 56.5% |
| Total | 4,464 | 100% | 4,546 | 100% |

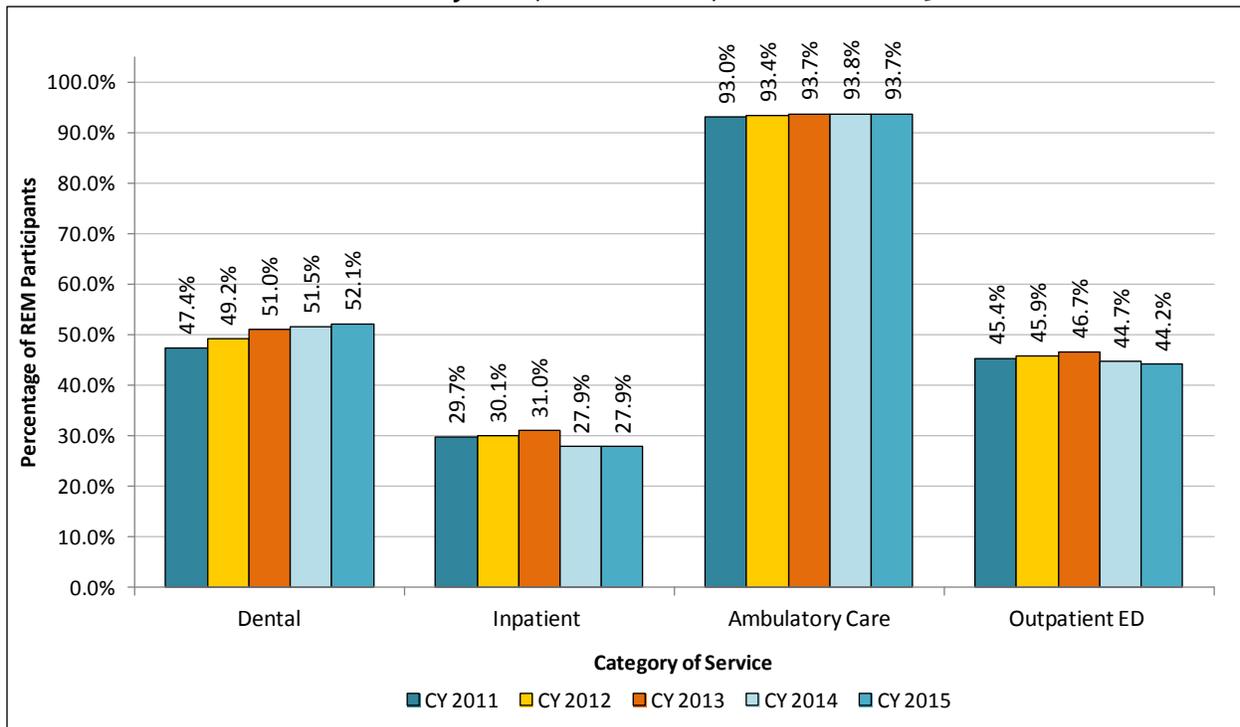
REM Service Utilization

Figure 17 presents the percentages of REM participants who received at least one dental, inpatient, ambulatory care, and outpatient ED visit covered by MCOs or FFS between CY 2011 and CY 2015.³⁸ The dental, inpatient, and ambulatory care visit measures serve as indicators of access to care. The percentage of participants with a dental visit increased during the evaluation period, from 47.4 percent in CY 2011 to 52.1 percent in CY 2015. The percentage of REM participants who had an inpatient visit declined by 1.8 percentage points between CY 2011 and CY 2015; however, the rate dropped by 3.1 percentage points from CY 2013 (31.0 percent) to CY 2015 (27.9 percent). The utilization rate for ambulatory care visits remained fairly steady throughout the evaluation period. Outpatient ED visits decreased by 1.2 percentage points over the entire evaluation period; however, the rate declined from a high of 46.7 percent in CY 2013 to 44.2 percent in CY 2015.

³⁸ The analysis includes participants who were in the REM program for any period during the calendar year and received MCO and FFS dental, inpatient, ambulatory care, and outpatient ED services. Inpatient service includes services performed in acute, chronic, hospice, and rehabilitation facilities.



Figure 17. Percentage of REM Participants who Received a Dental, Inpatient, Ambulatory Care, and ED Visit, CY 2011–CY 2015



Racial/Ethnic Disparities

Racial/ethnic disparities in health care are nationally recognized challenges. The Department is committed to improving health services utilization among racial/ethnic groups through its Managing-for-Results (MFR) program. MFR is a strategic planning and performance measurement process used to improve government programs. The Department’s Office of Minority Health and Health Disparities uses MFR to target goals in reducing racial/ethnic disparities. This section of the report presents enrollment trends among racial/ethnic groups and assesses disparities within several measures of service utilization.

In this section, please note that there was a substantial change to the quality of the race/ethnicity information beginning with CY 2014. The race/ethnicity questions on the Medicaid eligibility application were made optional in Medicaid’s new eligibility system. As a result, the number of individuals reporting their race/ethnicity decreased, and the proportion represented as ‘Other’ increased sharply.

Enrollment

Table 37 displays HealthChoice enrollment by race/ethnicity. Total enrollment increased within each racial/ethnic group between CY 2011 and CY 2015. However, this growth did not occur



uniformly across all categories. The number of participants enrolled in HealthChoice who were Black or Hispanic increased by 32.0 percent and 17.8 percent, respectively. In terms of the racial composition within HealthChoice, the percentage of Black participants decreased from 49.7 percent in CY 2011 to 44.9 percent in CY 2015, whereas the percentage of White participants remained steady. The largest increase was among participants with the race/ethnicity of “Other,” with a 200.7 percent increase over this period. Again, this change may in part be due to the fact that race/ethnicity questions on the Medicaid eligibility application were made optional in Medicaid’s new eligibility system, and the “Other” category includes those with an unknown race/ethnicity.

Table 37. HealthChoice Enrollment by Race/Ethnicity, CY 2011 and CY 2015

| Race/Ethnicity | CY 2011 | | CY 2015 | |
|----------------|---------------------|------------------------------------|---------------------|------------------------------------|
| | Number of Enrollees | Percentage of Total Race/Ethnicity | Number of Enrollees | Percentage of Total Race/Ethnicity |
| Black | 443,970 | 49.7% | 585,844 | 44.9% |
| White | 261,284 | 29.3% | 382,278 | 29.3% |
| Hispanic | 107,173 | 12.0% | 126,207 | 9.7% |
| Asian | 29,372 | 3.3% | 56,849 | 4.4% |
| Other | 50,979 | 5.7% | 153,314 | 11.8% |
| Total | 892,778 | 100% | 1,304,492 | 100% |

Ambulatory Care Visits

Figure 18 shows the percentage of children aged 0 through 18 years who received at least one MCO or FFS ambulatory care visit in CY 2011 and CY 2015 by race/ethnicity. The rate of ambulatory care visits among this age group increased for all races/ethnicities throughout the evaluation period with the exception of Asian participants, whose rate decreased from 83.8 percent to 82.8 percent. Hispanic participants had the highest rate in both CY 2011 (89.1 percent) and CY 2015 (89.7 percent), and Black participants had the lowest rate across the evaluation period (77.6 percent in CY 2011 and 78.3 percent in CY 2015). Appendix I presents MCO ambulatory care visit rates among children by race/ethnicity.



Figure 18. Percentage of HealthChoice Participants Aged 0–18 Years who Received an Ambulatory Care Visit by Race/Ethnicity, CY 2011 and CY 2015

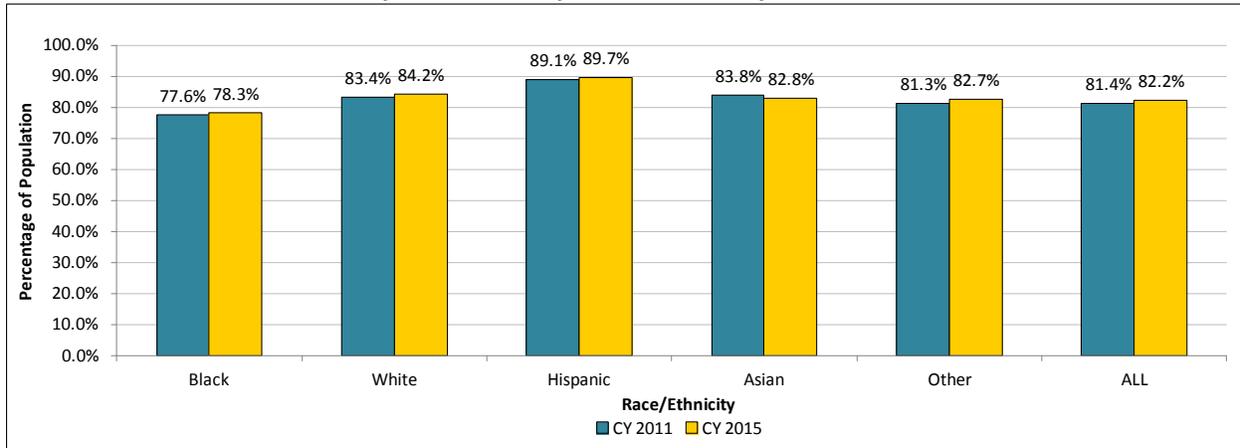
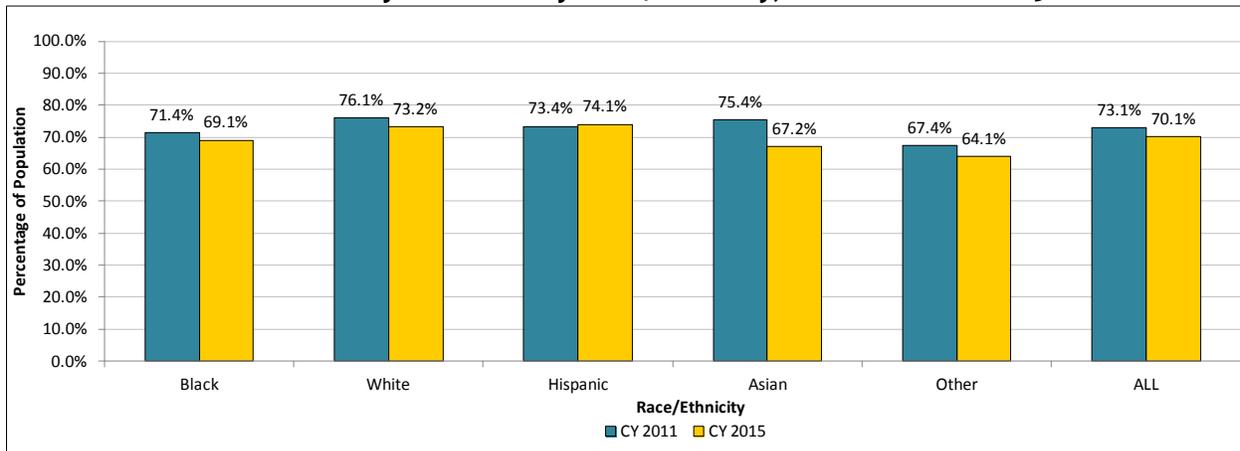


Figure 19 presents the percentage of adults aged 21 through 64 years who received at least one MCO or FFS ambulatory care visit in CY 2011 and CY 2015 by race/ethnicity. All groups experienced decreases in ambulatory care utilization during the evaluation period with the exception of Hispanic participants whose rate increased slightly from 73.4 percent in CY 2011 to 74.1 percent in CY 2015. As previously noted, participants enrolled in ACA expansion coverage groups utilized ambulatory care services at lower rates than other participants. This likely contributed to the overall decline in the percentage of HealthChoice participants who received ambulatory care services in CY 2014 and CY 2015. Asian participants experienced the greatest decrease during the evaluation (8.2 percentage points). Appendix I presents MCO ambulatory care visit rates among adults by race/ethnicity.

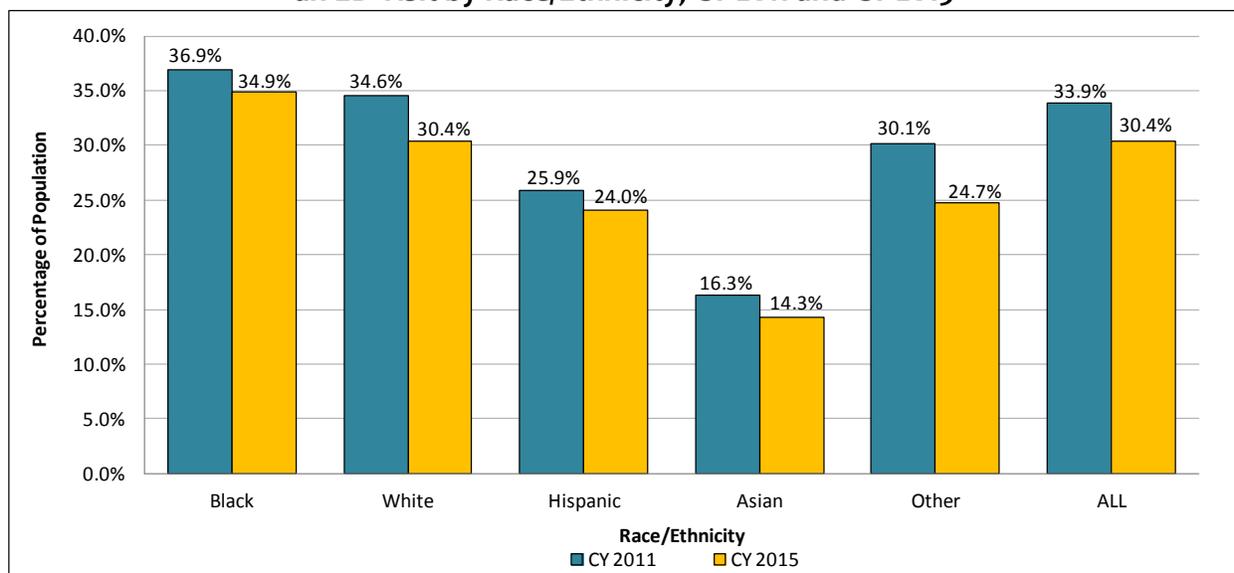
Figure 19. Percentage of HealthChoice Participants Aged 19–64 Years who Received an Ambulatory Care Visit by Race/Ethnicity, CY 2011 and CY 2015



ED Visits

Figure 20 displays the percentage of HealthChoice participants aged 0 through 64 years who had at least one ED visit by race/ethnicity in CY 2011 and CY 2015. This measure includes ED visits covered by HealthChoice MCOs and the FFS system, and the measure excludes ED visits that resulted in an inpatient hospital admission. The overall rate decreased from 33.9 percent in CY 2011 to 30.4 percent in CY 2015, and each racial/ethnic group experienced a drop in their ED visit rate. Across the measurement period, Black participants continued to have the highest ED visit rate, while Asian participants continued to have the lowest. Appendix I presents MCO ED visit rates among HealthChoice participants by race/ethnicity.

Figure 20. Percentage of HealthChoice Participants Aged 0–64 who Received an ED Visit by Race/Ethnicity, CY 2011 and CY 2015



Section IV Summary

This section of the report provided an overview of several special HealthChoice initiatives and programs. Some of the highlights include the following:

- The dental service utilization rate among children aged 4 to 20 years increased by 2.4 percentage points between CY 2011 and CY 2015, while rates for pregnant women aged 21 years and older decreased by 4.8 percentage points.
- In CY 2011, children and adults made up 50.3 percent and 49.7 percent, respectively, of HealthChoice participants with an MHD. In CY 2015, the proportion of adults increased to 60.6 percent. Among the HealthChoice population with an SUD, 93.4 percent of participants with an SUD were adults in CY 2015—a 17.4 percentage point increase from



CY 2011. These changes can be attributed to the large influx of adults joining HealthChoice due to the ACA Medicaid expansion.

- In CY 2015, children in foster care had a lower rate of ambulatory care visits, a higher rate of outpatient ED visits, and a higher rate of dental care utilization than other children in HealthChoice.
- Measures of access to prenatal care services declined during the evaluation period, reaching a low point in CY 2013, when the measure of the timeliness of prenatal care fell below the national HEDIS mean. All other measures in every year of the study period equaled or exceeded the national HEDIS mean.
- Enrollment in the Family Planning Program decreased by 6.2 percent between CY 2011 and CY 2015 (using the methodology for any period of enrollment). During this time period, more postpartum women transitioned to full Medicaid coverage because of the ACA expansion.
- Ambulatory care service utilization, CD4 testing rates, and viral load testing rates improved for participants with HIV/AIDS during the evaluation period. ED utilization by this population decreased by 2.4 percentage points during the evaluation period.
- The REM program provides case management, medically necessary private duty nursing, and other expanded benefits to participants who have one of a specified list of rare and expensive medical conditions. In CY 2015, the majority of REM participants were children (67.1 percent) and male (56.5 percent). The percentage of REM participants utilizing dental services increased by 4.7 percentage points between CY 2011 and CY 2015. The rates for ambulatory care utilization remained stable throughout the evaluation period, while the rates of outpatient ED visits increased.
- Between CY 2011 to CY 2015, enrollment for every racial/ethnic group in HealthChoice increased. The number of participants enrolled in HealthChoice who were Black or Hispanic increased by 32.0 percent and 17.8 percent, respectively. Regarding racial/ethnic disparities in access to care, Black children continue to have lower rates of ambulatory care visits than other children. Among the entire HealthChoice population, Black participants also have the highest ED utilization rates. The Department will continue to monitor these measures to reduce disparities between racial/ethnic groups.



Section V. ACA Medicaid Expansion Population

The PAC program was launched in 2006, offering a limited benefit package to childless adults aged 19 years and older who were not otherwise eligible for Medicare and Medicaid and whose incomes were less than or equal to 116 percent of the FPL.³⁹ Subsequently, under the optional Medicaid expansion in the ACA, states could expand Medicaid eligibility for adults under the age of 65 years with incomes up to 138 percent of the FPL. Maryland elected to expand its Medicaid eligibility, which resulted in the PAC program transitioning into a categorically eligible Medicaid population on January 1, 2014. The ACA Medicaid expansion population consists of three different coverage groups:

1. Former PAC participants
2. Childless adults not previously enrolled in PAC⁴⁰
3. Parents and caretaker relatives

This section presents demographic and service utilization measures for participants with any enrollment in one of the ACA Medicaid expansion coverage groups. Additionally, the ACA expansion participants, many of whom were gaining Medicaid coverage for the first time, may have had limited health care utilization literacy resulting in reduced access to care until they become more familiar with accessing care through Medicaid.

ACA Medicaid Expansion Population Demographics

The Maryland Medicaid program enrolled 283,716 adults through the ACA Medicaid expansion in CY 2014.⁴¹ The number of participants who received coverage for at least one month in an ACA expansion coverage group increased to 366,387 in CY 2015. There were 244,891 participants who were enrolled in an ACA expansion coverage group at the end of December 2015.

Table 38 compares key demographic and enrollment characteristics of the expansion population for those with any period of enrollment and those with 12 months of enrollment in CY 2014 and CY 2015. In CY 2014, Black and White participants made up 81 percent of the overall expansion population with any period of enrollment, decreasing to 79 percent of the CY 2015 cohort.

³⁹ The PAC program offered a limited benefit package to adults with low income, covering primary care visits, certain outpatient mental health services and prescription drugs.

⁴⁰ Though these individuals may have had prior enrollment in PAC, they were not enrolled in PAC as of December 2013. Only participants enrolled in PAC in December 2013 were automatically transferred into a Medicaid expansion coverage group.

⁴¹ The definition of this measure was updated to include participants with any enrollment in an ACA expansion coverage group during the CY. The definition used in last year's HealthChoice evaluation was based on the participant's last coverage group of the CY or their status as a former PAC participant.



Among participants who had any period of enrollment in an ACA coverage group, men composed 53.3 percent and 51.7 percent of the cohort, respectively, in CY 2014 and CY 2015. However, women made up a larger percentage of the ACA population with 12 months of enrollment – 51.8 percent in CY 2014 and 53.5 percent in CY 2015. In CY 2014, the majority of participants with any period of enrollment resided in the Baltimore Suburban region (27.7 percent), followed by the Washington suburban region (26.8 percent), and Baltimore City (22.6 percent); CY 2015 followed a similar distribution. Participants aged 19 to 34 years composed the largest portion of the ACA expansion population. In CY 2014, 40.1 percent of participants with any ACA enrollment were aged 19 to 34 years. This proportion increased to 43.0 percent in CY 2015. Approximately 42 percent of ACA Medicaid expansion participants were enrolled for the entire year in CY 2014. This increased to just over 46 percent in CY 2015. Participants who were enrolled in Medicaid for less than three months may have begun their enrollment in the latter part of the year.

Table 38. ACA Medicaid Expansion Population Demographics, Aged 19–64 Years, by Enrollment Period, CY 2014–CY 2015

| | CY 2014 | | | | CY 2015 | | | |
|-----------------------|--------------------------|-------------|-------------------------|-------------|--------------------------|-------------|-------------------------|-------------|
| | Any Period of Enrollment | | 12 Months of Enrollment | | Any Period of Enrollment | | 12 Months of Enrollment | |
| | # of Enrollees | % of Total | # of Enrollees | % of Total | # of Enrollees | % of Total | # of Enrollees | % of Total |
| Race/Ethnicity | | | | | | | | |
| Asian | 14,667 | 5.2% | 6,186 | 5.2% | 19,405 | 5.3% | 9,240 | 5.5% |
| Black | 126,001 | 44.4% | 53,246 | 45.0% | 159,003 | 43.4% | 71,681 | 42.4% |
| White | 103,879 | 36.6% | 46,541 | 39.4% | 130,477 | 35.6% | 65,388 | 38.7% |
| Hispanic | 7,379 | 2.6% | 3,364 | 2.8% | 11,737 | 3.2% | 5,826 | 3.4% |
| Other | 31,790 | 11.2% | 8,914 | 7.5% | 45,765 | 12.5% | 16,924 | 10.0% |
| Total | 283,716 | 100% | 118,251 | 100% | 366,387 | 100% | 169,059 | 100% |
| Sex | | | | | | | | |
| Female | 132,486 | 46.7% | 61,221 | 51.8% | 176,949 | 48.3% | 90,447 | 53.5% |
| Male | 151,230 | 53.3% | 57,030 | 48.2% | 189,438 | 51.7% | 78,612 | 46.5% |
| Total | 283,716 | 100% | 118,251 | 100% | 366,387 | 100% | 169,059 | 100% |
| Region | | | | | | | | |
| Baltimore City | 64,105 | 22.6% | 27,858 | 23.6% | 75,811 | 20.7% | 35,860 | 21.2% |
| Baltimore Suburban | 78,621 | 27.7% | 32,901 | 27.8% | 104,050 | 28.4% | 49,400 | 29.2% |
| Eastern Shore | 27,701 | 9.8% | 12,581 | 10.6% | 34,857 | 9.5% | 17,726 | 10.5% |



| | CY 2014 | | | | CY 2015 | | | |
|--------------------------|--------------------------|-------------|-------------------------|-------------|--------------------------|-------------|-------------------------|-------------|
| | Any Period of Enrollment | | 12 Months of Enrollment | | Any Period of Enrollment | | 12 Months of Enrollment | |
| | # of Enrollees | % of Total | # of Enrollees | % of Total | # of Enrollees | % of Total | # of Enrollees | % of Total |
| Southern Maryland | 14,746 | 5.2% | 6,346 | 5.4% | 19,125 | 5.2% | 9,035 | 5.3% |
| Washington Suburban | 76,119 | 26.8% | 28,611 | 24.2% | 103,446 | 28.2% | 42,740 | 25.3% |
| Western Maryland | 22,016 | 7.8% | 9,784 | 8.3% | 28,403 | 7.8% | 14,026 | 8.3% |
| Out of State | 408 | 0.1% | 170 | 0.1% | 695 | 0.2% | 272 | 0.2% |
| Total | 283,716 | 100% | 118,251 | 100% | 366,387 | 100% | 169,059 | 100% |
| Age Group (Years) | | | | | | | | |
| 19–34 | 113,752 | 40.1% | 42,096 | 35.6% | 157,464 | 43.0% | 63,059 | 37.3% |
| 35–49 | 75,423 | 26.6% | 33,042 | 27.9% | 95,307 | 26.0% | 46,328 | 27.4% |
| 50–64 | 94,541 | 33.3% | 43,113 | 36.5% | 113,615 | 31.0% | 59,672 | 35.3% |
| Total | 283,716 | 100% | 118,251 | 100% | 366,386 | 100% | 169,059 | 100% |
| Member Months | | | | | | | | |
| 1 | 16,107 | 5.7% | | | 10,539 | 2.9% | | |
| 2 | 10,090 | 3.6% | | | 10,197 | 2.8% | | |
| 3 | 7,976 | 2.8% | | | 41,730 | 11.4% | | |
| 4 | 8,986 | 3.2% | | | 20,535 | 5.6% | | |
| 5 | 7,629 | 2.7% | | | 14,516 | 4.0% | | |
| 6 | 7,509 | 2.6% | | | 12,962 | 3.5% | | |
| 7 | 12,787 | 4.5% | | | 15,185 | 4.1% | | |
| 8 | 13,902 | 4.9% | | | 15,521 | 4.2% | | |
| 9 | 19,036 | 6.7% | | | 16,376 | 4.5% | | |
| 10 | 39,878 | 14.1% | | | 14,477 | 4.0% | | |
| 11 | 21,565 | 7.6% | | | 25,290 | 6.9% | | |
| 12 | 118,251 | 41.7% | 118,251 | 100.0% | 169,059 | 46.1% | 169,059 | 100.0% |
| Total | 283,716 | 100% | 118,251 | 100% | 366,387 | 100% | 169,059 | 100% |

ACA Medicaid Expansion Population Service Utilization

This section presents the health care utilization of participants who received Medicaid coverage through the ACA Medicaid expansion. Table 39 displays the number and percentage of



participants who had an inpatient admission, ambulatory care visit, and outpatient ED visit in CY 2014 and CY 2015. Measures are presented for individuals with any period of enrollment and 12 months of enrollment. ACA Medicaid expansion participants with 12 months of enrollment provide an MCO with more time and opportunities to intervene in a participant’s health care compared to participants with any period of enrollment (e.g., one day or a few months of coverage). Tracking the utilization of the ACA expansion population over the next several years will offer insights into the health conditions and utilization of the expansion population. Key findings from the table include the following:

- Overall, 9.4 percent of ACA Medicaid expansion participants with any period of enrollment had an inpatient admission in CY 2014, decreasing to 8.4 percent in CY 2015. Participants who were enrolled for the entire year experienced a higher rate of inpatient admissions; their rates were 11.9 percent in CY 2014 and 11.3 percent in CY 2015.
- In both CY 2014 and CY 2015, 61 percent of ACA Medicaid expansion participants with any period of enrollment had an ambulatory care visit. Visit rates increased for expansion participants enrolled for the entire year. Among those with 12 months of enrollment, 80.8 percent of participants in CY 2014 and 82.2 percent of participants in CY 2015 had an ambulatory care visit.
- In CY 2014, 31.4 percent of ACA Medicaid expansion participants with any period of enrollment had an ED visit. This rate increases to 39.6 percent for those enrolled for the entire year. Similar rates were seen in CY 2015.

Table 39. Service Utilization of ACA Medicaid Expansion Population by Enrollment Period, Aged 19–64 Years, CY 2014–CY 2015

| Enrollment Period | CY 2014 | | | CY 2015 | | |
|-------------------------------|-----------------|-----------------|---------------------|-----------------|-----------------|---------------------|
| | Number of Users | Total Enrollees | Percentage of Total | Number of Users | Total Enrollees | Percentage of Total |
| Inpatient Admissions | | | | | | |
| Any Period of Enrollment | 26,566 | 283,716 | 9.4% | 30,295 | 366,687 | 8.4% |
| 12 Months of Enrollment | 14,025 | 118,251 | 11.9% | 19,118 | 169,059 | 11.3% |
| Ambulatory Care Visits | | | | | | |
| Any Period of Enrollment | 174,123 | 283,716 | 61.4% | 225,858 | 366,687 | 61.6% |
| 12 Months of Enrollment | 95,578 | 118,251 | 80.8% | 139,010 | 169,059 | 82.2% |
| Outpatient ED Visits | | | | | | |
| Any Period of Enrollment | 89,040 | 283,716 | 31.4% | 110,500 | 366,687 | 30.2% |
| 12 Months of Enrollment | 46,834 | 118,251 | 39.6% | 65,870 | 169,059 | 39.0% |



ACA Medicaid Expansion Population with Mental Health and Substance Use Disorders

This section presents the rates of behavioral health diagnoses among ACA Medicaid expansion participants. Table 40 shows the rates of MHDs, SUDs, and co-occurring MHD and SUD conditions among ACA Medicaid expansion participants aged 19 to 64 years. Rates are shown for those with any period of enrollment and 12 months of enrollment in CY 2014 and CY 2015.

MCOs have more time to intervene in a participant's health care if the participant has 12 months of continuous enrollment compared to participants with any period of enrollment (e.g., a day or a few months of coverage). The percentages of participants diagnosed with an MHD, SUD, or co-occurring MHD and SUD diagnosis were higher among participants who were enrolled for a 12 month period compared to those with any period enrollment. The percentage of participants with any period of enrollment and an MHD only increased slightly across the measurement period, from 9.6 percent in CY 2014 to 9.8 percent in CY 2015. In contrast, the rates of SUD only and dual diagnoses decreased from CY 2014 to CY 2015 by less than a percentage point.

Table 40. Behavioral Health Diagnosis of Medicaid Participants in ACA Expansion Coverage Groups by Enrollment Period, Aged 19–64 years, CY 2014–CY 2015

| Enrollment Period | CY 2014 | | | CY 2015 | | |
|-------------------------------------|-------------------|--------------------|------------|-------------------|--------------------|------------|
| | # of Participants | Total Participants | % of Total | # of Participants | Total Participants | % of Total |
| MHD Only | | | | | | |
| Any Period | 27,336 | 283,716 | 9.6% | 36,016 | 366,387 | 9.8% |
| 12 Months | 15,873 | 118,251 | 13.4% | 23,209 | 169,059 | 13.7% |
| SUD Only | | | | | | |
| Any Period | 18,063 | 283,716 | 6.4% | 20,438 | 366,387 | 5.6% |
| 12 Months | 9,800 | 118,251 | 8.3% | 11,886 | 169,059 | 7.0% |
| Dual Diagnosis (MHD and SUD) | | | | | | |
| Any Period | 12,093 | 283,716 | 4.3% | 15,189 | 366,387 | 4.1% |
| 12 Months | 7,974 | 118,251 | 6.7% | 10,802 | 169,059 | 6.4% |
| None | | | | | | |
| Any Period | 226,224 | 283,716 | 79.7% | 294,744 | 366,387 | 80.4% |
| 12 Months | 84,604 | 118,251 | 71.5% | 123,162 | 169,059 | 72.9% |

Section V Summary

This section of the report examined the demographic characteristics and health care utilization of the ACA Medicaid expansion population in CY 2014 and CY 2015. A majority of the population resided in Baltimore City and the Washington and Baltimore Suburban regions. The percentage of participants with any period of enrollment who had at least one ambulatory care visit remained stable across the measurement period at slightly above 61 percent in CY 2014 and CY



2015. There were minor decreases in the percentages of participants who had at least one outpatient ED visit or an inpatient admission from CY 2014 to CY 2015. In CY 2014, 9.4 percent of participants with any period of enrollment in an ACA coverage group had an inpatient visit; this rate dropped to 8.4 percent in CY 2015. Among the same group of participants, 31.4 percent had at least one ED visit in CY 2014 compared to 30.2 percent in CY 2015.

Participants who were enrolled in Medicaid for 12 months were more likely to have had an ambulatory care visit, ED visit, or inpatient admission. In addition, this group had a higher rate of diagnosis of behavioral health conditions.



Conclusion

HealthChoice is a mature managed care program that provided services to nearly 22 percent of Marylanders during CY 2015. The information presented in this evaluation provides strong evidence that HealthChoice has been successful in achieving its stated goals of improving coverage and access to care, providing a medical home to participants, and improving the quality of care.

Some of the successes achieved during this evaluation period include increasing the rates of breast cancer screenings, ambulatory care visits among children in foster care, and HbA1c testing among participants with diabetes. Among individuals with HIV/AIDS, ambulatory care service utilization, CD4 testing, and viral load testing rates increased, while ED utilization dropped. The percentage of REM participants receiving a dental visit increased by 4.7 percentage points. The percentage of HealthChoice participants aged 19 to 64 years with at least one inpatient admission declined by 5.3 percentage points.

Recent developments will continue to affect HealthChoice in the coming years. Primarily, the ACA expansion of Medicaid eligibility that transitioned former PAC participants and enrolled previously uninsured individuals into HealthChoice markedly increased enrollment in CY 2014 and CY 2015 compared to prior years. As these HealthChoice participants begin to understand how to navigate and use their newly obtained full-benefit coverage, it is expected that there will be an increase in their service utilization rates across the spectrum of somatic and behavioral health services. In addition, the state's chronic health home demonstration is currently underway, and other programs—such as the Residential Treatment for Individuals with SUD Program and the Evidence-Based Home Visiting Service Pilot Program—are anticipated to begin in July 2017.

As with any program, there are areas that need improvement to ensure that the growing number of participants have access to quality care. Some of these areas include improving diabetes care, reducing racial/ethnic disparities, and increasing rates of cervical cancer screening. The Department is committed to working with CMS and other stakeholders to identify and address necessary programmatic changes.



References

- American Academy of Pediatrics (n.d.). *Medicaid state report*. Retrieved from http://www.aap.org/en-us/professional-resources/Research/Medicaid%20State%20Reports/1996_Maryland_Medicaid.pdf
- Bankoski, A., De Pinto, C., Hess-Mutinda, R., & McEachern, Y. (2012). *Asthma in Maryland 2012*. Prepared by the Maryland Asthma Control Program, Family Health Administration, Maryland Department of Health and Mental Hygiene. Retrieved from <http://phpa.dhmh.maryland.gov/mch/Documents/Asthma%20in%20Maryland%202012.pdf>
- Billings, J., Parikh, N., & Mijanovich, T. (2000). *Issue Brief: Emergency department use: The New York story*. Retrieved from http://www.commonwealthfund.org/usr_doc/billings_nystory.pdf
- Centers for Disease Control and Prevention. (n.d.a). *CDC National Asthma Control Program – America Breathing Easier*. Retrieved from http://www.cdc.gov/asthma/pdfs/breathing_easier_brochure.pdf
- Centers for Disease Control and Prevention (n.d.b). *Gynecological cancers: Cervical cancer screening*. Retrieved from http://www.cdc.gov/cancer/cervical/basic_info/screening.htm#screen
- Centers for Disease Control and Prevention. (2014). *Breast cancer screening: Kinds of screening tests*. Retrieved from http://www.cdc.gov/cancer/breast/basic_info/screening.htm
- Centers for Disease Control and Prevention. (2015). *Human Papillomavirus (HPV) – Questions and answers*. Retrieved from: <http://www.cdc.gov/hpv/parents/questions-answers.html>
- Centers for Disease Control and Prevention. (2016a). *Colorectal (Colon) Cancer*. Retrieved from http://www.cdc.gov/cancer/colorectal/basic_info/screening/
- Centers for Disease Control and Prevention. (2016b). *At a glance 2016: Diabetes, working to reverse the US epidemic*. Retrieved from <https://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2016/diabetes-aag.pdf>
- Delmarva Foundation. (2015). *Medicaid managed care organization: 2014 Annual technical report*. Columbia, MD: Author.
- Delmarva Foundation. (2017). *Medicaid managed care organization: 2016 Annual technical report*. Columbia, MD: Author.



- Gates, A., Rudowitz, R., Artiga, S., & Snyder, L. (2016). *Two year trends in Medicaid and CHIP enrollment data: Findings from the CMS Performance Indicator Project*. The Henry J. Kaiser Family Foundation. Retrieved from <http://files.kff.org/attachment/Issue-Brief-Two-Year-Trends-in-Medicaid-and-CHIP-Enrollment-Data>
- HealthcareData Company, LLC. (2016). *Statewide executive summary, HealthChoice participating organizations, HEDIS® 2016*. Mechanicsburg, PA: Author.
- The Kaiser Family Foundation State Health Facts. Data Source: Census Bureau's March 2014, March 2015, and March 2016 Current Population Survey (CPS: Annual Social and Economic Supplements). Retrieved from <http://kff.org/other/state-indicator/total-population/>
- The Medicaid and CHIP Payment and Access Commission (MACPAC). (2014). *MACStats: Medicaid and CHIP program statistics*. Retrieved from <https://www.macpac.gov/wp-content/uploads/2015/03/March-2014-MACStats.pdf>
- National Cancer Institute. (2014). *Colorectal cancer*. Retrieved from <http://www.cancer.gov/types/colorectal/screening-fact-sheet>
- The Pew Center on the States. (2010). *The cost of delay: State dental policies fail one in five children*. Retrieved from <http://www.pewtrusts.org/~media/legacy/uploadedfiles/costofdelaywebpdf.pdf>
- The Pew Center on the States. (2011). *The state of children's dental health: Making coverage matter*. Retrieved from http://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/state_policy/childrensdental50statereport2011pdf.pdf
- U.S. Cancer Statistics Working Group. (2016). *United States Cancer Statistics: 1999–2013 Incidence and Mortality Web-based Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute. Retrieved from <https://nccd.cdc.gov/uscs/>
- WB&A Market Research. (2013). *State of Maryland HealthChoice adult and child populations, CAHPS® 2013 5.0H adult and child Medicaid surveys – Executive summary*. Crofton, MD: Author.
- WBA Research. (2016). *State of Maryland HealthChoice adult and child populations, CAHPS® 2016 5.0H adult and child Medicaid satisfaction surveys – Executive summary*. Crofton, MD: Author.



Appendix A. Coverage Category Definitions

Table A1. Coverage Category Inclusion Criteria

| Coverage Category | Inclusion Criteria |
|--------------------------------|--|
| Disabled | Coverage Group = A04, H01, H98, H99, L01, L98, L99, S01, S02, S03, S04, S05, S06, S07, S08, S10, S13, S14, S16, S98, S99, T01, T02, T03, T04, T05, T99 |
| MCHP | Coverage Group = D02, D04, P13, P14 |
| | OR |
| | Coverage Group = F05, P06, P07 AND Coverage Type = "S" |
| ACA Expansion | Coverage Group = A01, A02, A03, S09 |
| Families & Children | All other Coverage Groups/Coverage Types |

Table A2. Medicaid Coverage Group Descriptions

| Coverage Group | Description |
|----------------|---|
| A01 | Childless Adults < 65, 138% FPL, former PAC |
| A02 | Childless Adults < 65, 138% FPL, inc disabled |
| A03 | Parents and Caretaker Relative 124%-138% FPL |
| A04 | Disabled Adults, no Medicare 77% FPL |
| C13 | Presumptive Eligibility |
| D01 | Employer Sponsored Insurance (ESI),200%-250% FPL |
| D02 | MCHP Premium, 212%-264% FPL |
| D03 | Employer Sponsored Insurance (ESI),250%-300% FPL |
| D04 | MCHP Premium, 265%-322% FPL |
| E01 | IV-E Adoption & Foster Care |
| E02 | FAC Foster Care |
| E03 | State-Funded Foster Care |
| E04 | State-Funded Subsidized Adoption |
| E05 | Former Foster Care up to 26 years old |
| F01 | TCA Recipients |
| F02 | Post-TCA: Earnings Extension |
| F03 | Post-TCA: Support Extension |
| F04 | FAC Non-MA Requirement |
| F05 | Parents/Primary Caretakers and Children <123% FPL |
| F98 | Children 19 and 20 123% FPL |
| F99 | FAC - Med Needy Spenddown |
| G01 | Refugee Cash Assistance |



| Coverage Group | Description |
|----------------|---|
| G02 | Post RCA: Earnings Extension |
| G98 | Refugee Med Needy Non-Spenddown |
| G99 | Refugee Med Needy Spenddown |
| H01 | HCB Waiver |
| H98 | HCB Waiver Med Needy |
| H99 | HCB Waiver Spenddown |
| L01 | SSI Recipient in LTC |
| L98 | ABD Long Term Care |
| L99 | ABD Long Term Care Spenddown |
| P01 | GPA to Pregnant Women (ended 7/97) |
| P02 | Pregnant Women up to 189% FPL |
| P03 | Newborns |
| P04 | Med Needy Newborns (ended 6/30/98) |
| P05 | Newborns of PWC Moms (ended 6/30/98) |
| P06 | Newborns of Elig Mothers and their < 1 |
| P07 | Children 1-19 , 1-6 143% FPL, 6-19 138% FPL |
| P08 | Child Under 19, up to 100% FPL |
| P09 | Maryland Kids Count (ended 6/30/98) |
| P10 | Family Planning Program (FPP) |
| P11 | Pregnant Women 190% - 264% of FPL |
| P12 | Newborns of P11 Mothers |
| P13 | Child Under 19, up to 189% FPL |
| P14 | Title XXI MCHP. under 19, 190-211% FPL |
| S01 | Public Assistance to Adults (PAA) |
| S02 | SSI Recipients |
| S03 | Qualified Medicare Beneficiary (QMB) |
| S04 | Pickle Amendment |
| S05 | Section 5103 |
| S06 | Qualified Disabled Working Individuals |
| S07 | SLMB group I |
| S08 | SLMB/MPAP |
| S09 | MPAP Prior to FY07 (ended 12/31/13) |
| S10 | QMB and MPAP |
| S11 | TEMHA/MPAP |
| S12 | Family Planning Program/MPAP |
| S13 | ACE or EID |



| Coverage Group | Description |
|----------------|--|
| S14 | SLMB group II |
| S15 | SLMB group III |
| S16 | Increased Community Services Program (ICS) formerly MPDP |
| S17 | MPDP/SLMB I |
| S18 | MPDP/SLMB II |
| S98 | ABD - Med Needy |
| S99 | ABD - Spenddown |
| T01 | TCA Adult or Child In LTC |
| T02 | Family LTC Med Needy |
| T03 | Medicaid Child Under 1 in LTC |
| T04 | Medicaid Child Under 6 in LTC |
| T05 | Medicaid Child Under 19 in LTC |
| T99 | Family LTC Med Needy Spenddown |
| W01 | Women's Breast & CC |
| X01 | State-Funded Aliens |
| X02 | MAGI and Non-MAGI Undocumented or Ineligible Aliens, Emergency Services only |
| X03 | MAGI Undocumented or Ineligible Aliens (dropped 2/15/17) |

Table A3. Medicaid Coverage Type Descriptions

| Coverage Type | Description |
|---------------|------------------------|
| A | Aged |
| B | Blind |
| C | Complimentary Coverage |
| D | Disabled |
| E | FC and SA |
| F | Family |
| G | Refugee |
| H | HCB Waiver |
| M | Medicaid Only |
| N | Not in CARES |
| P | Pregnant |
| R | Regular |
| T | Family LTC |
| U | Unemployed |
| X | Miscellaneous |



Appendix B. Ambulatory Care Visit Rates – MCO vs. MCO + FFS

Table B1. Percentage of the HealthChoice Population who Received an Ambulatory Care Visit (MCO vs. Any Type), CY 2011–CY 2015

| Year | MCO Ambulatory Care Visits | | | All Ambulatory Care Visits (MCO + FFS) | | |
|---------|----------------------------|--------------|--------------|--|--------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| CY 2011 | 892,778 | 689,535 | 77.2% | 892,778 | 699,733 | 78.4% |
| CY 2012 | 930,324 | 720,040 | 77.4% | 930,324 | 731,209 | 78.6% |
| CY 2013 | 962,413 | 748,652 | 77.8% | 962,413 | 763,566 | 79.3% |
| CY 2014 | 1,250,865 | 943,244 | 75.4% | 1,250,865 | 966,101 | 77.2% |
| CY 2015 | 1,304,492 | 964,242 | 73.9% | 1,304,492 | 992,394 | 76.1% |



Table B2. Percentage of the HealthChoice Population who Received an Ambulatory Care Visit (MCO vs. Any Type) by Age Group, CY 2011–CY 2015

| Age Group (Years) | MCO Ambulatory Care Visits | | | All Ambulatory Care Visits (MCO + FFS) | | |
|-------------------|----------------------------|----------------|--------------|--|----------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| CY 2011 | | | | | | |
| 0 < 1 | 35,522 | 31,726 | 89.3% | 35,522 | 32,631 | 91.9% |
| 1-2 | 77,877 | 69,802 | 89.6% | 77,877 | 70,231 | 78.6% |
| 3-9 | 231,581 | 190,071 | 82.1% | 231,581 | 191,669 | 82.8% |
| 10-18 | 224,639 | 167,285 | 74.5% | 224,639 | 168,949 | 75.2% |
| 19-39 | 222,100 | 152,398 | 68.6% | 222,100 | 156,030 | 70.3% |
| 40-64 | 101,059 | 78,253 | 77.4% | 101,059 | 80,223 | 79.4% |
| All | 892,778 | 689,535 | 77.2% | 892,778 | 699,733 | 78.4% |
| CY 2012 | | | | | | |
| 0 < 1 | 35,832 | 31,971 | 89.2% | 35,832 | 32,963 | 92.0% |
| 1-2 | 77,213 | 69,111 | 89.5% | 77,213 | 69,666 | 90.2% |
| 3-9 | 243,308 | 199,773 | 82.1% | 243,308 | 201,690 | 82.9% |
| 10-18 | 233,551 | 175,554 | 75.2% | 233,551 | 177,350 | 75.9% |
| 19-39 | 234,312 | 161,139 | 68.8% | 234,312 | 165,087 | 70.5% |
| 40-64 | 106,108 | 82,492 | 77.7% | 106,108 | 84,453 | 79.6% |
| All | 930,324 | 720,040 | 77.4% | 930,324 | 731,209 | 78.6% |
| CY 2013 | | | | | | |
| 0 < 1 | 35,787 | 32,122 | 89.8% | 35,787 | 32,995 | 92.2% |
| 1-2 | 77,349 | 69,239 | 89.5% | 77,349 | 69,688 | 90.1% |
| 3-9 | 251,988 | 208,114 | 82.6% | 251,988 | 210,052 | 83.4% |
| 10-18 | 242,084 | 184,165 | 76.1% | 242,084 | 187,231 | 77.3% |
| 19-39 | 244,331 | 168,596 | 69.0% | 244,331 | 174,209 | 71.3% |
| 40-64 | 110,874 | 86,416 | 77.9% | 110,874 | 89,391 | 80.6% |
| All | 962,413 | 748,652 | 77.8% | 962,413 | 763,566 | 79.3% |
| CY 2014 | | | | | | |
| 0 < 1 | 36,580 | 32,478 | 88.8% | 36,580 | 33,524 | 91.6% |
| 1-2 | 78,987 | 70,299 | 89.0% | 78,987 | 70,853 | 89.7% |
| 3-9 | 264,057 | 217,088 | 82.2% | 264,057 | 219,534 | 83.1% |
| 10-18 | 260,420 | 199,177 | 76.5% | 260,420 | 202,776 | 77.9% |
| 19-39 | 365,728 | 238,752 | 65.3% | 365,728 | 248,206 | 67.9% |
| 40-64 | 245,093 | 185,450 | 75.7% | 245,093 | 191,208 | 78.0% |
| All | 1,250,865 | 943,244 | 75.4% | 1,250,865 | 966,101 | 77.2% |
| CY 2015 | | | | | | |
| 0 < 1 | 36,162 | 32,103 | 88.8% | 36,162 | 33,290 | 92.1% |
| 1-2 | 78,735 | 69,808 | 88.7% | 78,735 | 70,520 | 89.6% |
| 3-9 | 262,608 | 214,848 | 81.8% | 262,608 | 218,012 | 83.0% |
| 10-18 | 265,131 | 202,248 | 76.3% | 265,131 | 206,337 | 77.8% |
| 19-39 | 392,021 | 246,673 | 62.9% | 392,021 | 258,467 | 65.9% |
| 40-64 | 269,835 | 198,562 | 73.6% | 269,835 | 205,768 | 76.3% |
| All | 1,304,492 | 964,242 | 73.9% | 1,304,492 | 992,394 | 76.1% |



Table B3. Percentage of the HealthChoice Population who Received an Ambulatory Care Visit (MCO vs. Any Type) by Region, CY 2011–CY 2015

| Region | MCO Ambulatory Care Visits | | | All Ambulatory Care Visits (MCO + FFS) | | |
|---------------------|----------------------------|----------------|--------------|--|----------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| CY 2011 | | | | | | |
| Baltimore City | 192,391 | 146,039 | 75.9% | 192,391 | 148,692 | 77.3% |
| Baltimore Suburban | 241,809 | 188,420 | 77.9% | 241,809 | 191,237 | 79.1% |
| Eastern Shore | 86,767 | 71,368 | 82.3% | 86,767 | 72,411 | 83.5% |
| Southern Maryland | 44,523 | 33,850 | 76.0% | 44,523 | 34,345 | 77.1% |
| Washington Suburban | 252,334 | 189,867 | 75.2% | 252,334 | 192,171 | 76.2% |
| Western Maryland | 72,789 | 58,513 | 80.4% | 72,789 | 59,352 | 81.5% |
| Out of State | 2,165 | 1,478 | 68.3% | 2,165 | 1,525 | 70.4% |
| All | 892,778 | 689,535 | 77.2% | 892,778 | 699,733 | 78.4% |
| CY 2012 | | | | | | |
| Baltimore City | 192,931 | 146,824 | 76.1% | 192,931 | 149,381 | 77.4% |
| Baltimore Suburban | 256,717 | 200,864 | 78.2% | 256,717 | 203,980 | 79.5% |
| Eastern Shore | 89,359 | 73,220 | 81.9% | 89,359 | 74,428 | 83.3% |
| Southern Maryland | 46,627 | 35,345 | 75.8% | 46,627 | 35,933 | 77.1% |
| Washington Suburban | 266,826 | 201,869 | 75.7% | 266,826 | 204,623 | 76.7% |
| Western Maryland | 75,573 | 60,391 | 79.9% | 75,573 | 61,300 | 81.1% |
| Out of State | 2,291 | 1,527 | 66.7% | 2,291 | 1,564 | 68.3% |
| All | 930,324 | 720,040 | 77.4% | 930,324 | 731,209 | 78.6% |
| CY 2013 | | | | | | |
| Baltimore City | 189,782 | 144,502 | 76.1% | 189,782 | 148,455 | 78.2% |
| Baltimore Suburban | 271,132 | 212,992 | 78.6% | 271,132 | 217,072 | 80.1% |
| Eastern Shore | 91,161 | 74,292 | 81.5% | 91,161 | 75,808 | 83.2% |
| Southern Maryland | 48,558 | 36,878 | 75.9% | 48,558 | 37,661 | 77.6% |
| Washington Suburban | 280,970 | 215,231 | 76.6% | 280,970 | 218,426 | 77.7% |
| Western Maryland | 78,559 | 63,200 | 80.4% | 78,559 | 64,550 | 82.2% |
| Out of State | 2,251 | 1,557 | 69.2% | 2,251 | 1,594 | 70.8% |
| All | 962,413 | 748,652 | 77.8% | 962,413 | 763,566 | 79.3% |
| CY 2014 | | | | | | |
| Baltimore City | 245,216 | 179,617 | 73.2% | 245,216 | 185,531 | 75.7% |
| Baltimore Suburban | 354,121 | 269,715 | 76.2% | 354,121 | 276,101 | 78.0% |
| Eastern Shore | 116,633 | 92,143 | 79.0% | 116,633 | 94,521 | 81.0% |
| Southern Maryland | 63,353 | 47,176 | 74.5% | 63,353 | 48,456 | 76.5% |
| Washington Suburban | 368,794 | 274,894 | 74.5% | 368,794 | 279,546 | 75.8% |
| Western Maryland | 100,513 | 78,231 | 77.8% | 100,513 | 80,424 | 80.0% |
| Out of State | 2,235 | 1,468 | 65.7% | 2,235 | 1,522 | 68.1% |
| All | 1,250,865 | 943,244 | 75.4% | 1,250,865 | 966,101 | 77.2% |
| CY 2015 | | | | | | |
| Baltimore City | 246,406 | 176,628 | 71.7% | 246,406 | 183,494 | 74.5% |
| Baltimore Suburban | 371,115 | 278,134 | 74.9% | 371,115 | 285,940 | 77.0% |
| Eastern Shore | 120,337 | 93,753 | 77.9% | 120,337 | 96,406 | 80.1% |
| Southern Maryland | 65,792 | 47,711 | 72.5% | 65,792 | 49,256 | 74.9% |



| Region | MCO Ambulatory Care Visits | | | All Ambulatory Care Visits (MCO + FFS) | | |
|---------------------|----------------------------|----------------|--------------|--|----------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| Washington Suburban | 395,132 | 287,150 | 72.7% | 395,132 | 293,763 | 74.3% |
| Western Maryland | 104,029 | 79,844 | 76.8% | 104,029 | 82,456 | 79.3% |
| Out of State | 1,681 | 1,022 | 60.8% | 1,681 | 1,079 | 64.2% |
| All | 1,304,492 | 964,242 | 73.9% | 1,304,492 | 992,394 | 76.1% |

Table B4. Percentage of the HealthChoice Population who Received an Ambulatory Care Visit (MCO vs. Any Type) by Coverage Category, CY 2011–CY 2015

| Coverage Category | MCO Ambulatory Care Visits | | | All Ambulatory Care Visits (MCO + FFS) | | |
|---------------------|----------------------------|----------------|--------------|--|----------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| CY 2011 | | | | | | |
| Disabled | 85,034 | 65,076 | 76.5% | 85,034 | 67,076 | 78.9% |
| Families & Children | 690,104 | 529,329 | 76.7% | 690,104 | 536,841 | 77.8% |
| MCHP | 117,640 | 95,130 | 80.9% | 117,640 | 95,816 | 81.4% |
| All | 892,778 | 689,535 | 77.2% | 892,778 | 699,733 | 78.4% |
| CY 2012 | | | | | | |
| Disabled | 82,503 | 64,349 | 78.0% | 82,503 | 66,120 | 80.1% |
| Families & Children | 721,672 | 553,801 | 76.7% | 721,672 | 562,364 | 77.9% |
| MCHP | 126,149 | 101,890 | 80.8% | 126,149 | 102,725 | 81.4% |
| All | 930,324 | 720,040 | 77.4% | 930,324 | 731,209 | 78.6% |
| CY 2013 | | | | | | |
| Disabled | 83,229 | 65,184 | 78.3% | 83,229 | 69,019 | 82.9% |
| Families & Children | 752,704 | 580,947 | 77.2% | 752,704 | 591,118 | 78.5% |
| MCHP | 126,480 | 102,521 | 81.1% | 126,480 | 103,429 | 81.8% |
| All | 962,413 | 748,652 | 77.8% | 962,413 | 763,566 | 79.3% |
| CY 2014 | | | | | | |
| ACA Expansion | 234,117 | 152,945 | 65.3% | 234,117 | 160,526 | 68.6% |
| Disabled | 89,846 | 70,995 | 79.0% | 89,846 | 74,301 | 82.7% |
| Families & Children | 789,012 | 608,277 | 77.1% | 789,012 | 618,919 | 78.4% |
| MCHP | 137,890 | 111,027 | 80.5% | 137,890 | 112,355 | 81.5% |
| All | 1,250,865 | 943,244 | 75.4% | 1,250,865 | 966,101 | 77.2% |
| CY 2015 | | | | | | |
| ACA Expansion | 300,955 | 186,958 | 62.1% | 300,955 | 197,958 | 65.8% |
| Disabled | 86,289 | 68,484 | 79.4% | 86,289 | 71,429 | 82.8% |
| Families & Children | 757,252 | 578,088 | 76.3% | 757,252 | 590,543 | 78.0% |
| MCHP | 159,996 | 130,712 | 81.7% | 159,996 | 132,464 | 82.8% |
| All | 1,304,492 | 964,242 | 73.9% | 1,304,492 | 992,394 | 76.1% |



Appendix C. ED Visit Rates – MCO vs. MCO + FFS

Table C1. Percentage of the HealthChoice Population who Received an ED Visit (MCO vs. Any Type) by Coverage Category, CY 2011–CY 2015

| Coverage Category | MCO Outpatient ED Visits | | | All Outpatient ED Visits (MCO + FFS) | | |
|-----------------------|--------------------------|----------------|--------------|--------------------------------------|----------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| CY 2011 | | | | | | |
| Disabled | 85,034 | 34,418 | 40.5% | 85,034 | 37,547 | 44.2% |
| Families and Children | 690,104 | 224,668 | 32.6% | 690,104 | 238,064 | 34.5% |
| MCHP | 117,640 | 25,601 | 21.8% | 117,640 | 26,663 | 22.7% |
| All | 892,778 | 284,687 | 31.9% | 892,778 | 302,274 | 33.9% |
| CY 2012 | | | | | | |
| Disabled | 82,503 | 34,305 | 41.6% | 82,503 | 37,027 | 44.9% |
| Families and Children | 721,672 | 234,231 | 32.5% | 721,672 | 247,831 | 34.3% |
| MCHP | 126,149 | 27,215 | 21.6% | 126,149 | 28,419 | 22.5% |
| All | 930,324 | 295,751 | 31.8% | 930,324 | 313,277 | 33.7% |
| CY 2013 | | | | | | |
| Disabled | 83,229 | 34,731 | 41.7% | 83,229 | 37,475 | 45.0% |
| Families and Children | 752,704 | 241,326 | 32.1% | 752,704 | 254,129 | 33.8% |
| MCHP | 126,480 | 26,563 | 21.0% | 126,480 | 27,484 | 21.7% |
| All | 962,413 | 302,620 | 31.4% | 962,413 | 319,088 | 33.2% |
| CY 2014 | | | | | | |
| ACA Expansion | 234,117 | 67,509 | 28.8% | 234,117 | 78,770 | 33.6% |
| Disabled | 89,846 | 37,616 | 41.9% | 89,846 | 40,176 | 44.7% |
| Families and Children | 789,012 | 241,969 | 30.7% | 789,012 | 254,854 | 32.3% |
| MCHP | 137,890 | 27,321 | 19.8% | 137,890 | 28,601 | 20.7% |
| All | 1,250,865 | 374,415 | 29.9% | 1,250,865 | 402,401 | 32.2% |
| CY 2015 | | | | | | |
| ACA Expansion | 300,955 | 76,843 | 25.5% | 300,955 | 92,713 | 30.8% |
| Disabled | 86,289 | 35,383 | 41.0% | 86,289 | 37,452 | 43.4% |
| Families and Children | 757,252 | 216,586 | 28.6% | 757,252 | 233,702 | 30.9% |
| MCHP | 159,996 | 31,290 | 19.6% | 159,996 | 33,164 | 20.7% |
| All | 1,304,492 | 360,102 | 27.6% | 1,304,492 | 397,031 | 30.4% |



Table C2. Percentage of the HealthChoice Population who Received an ED Visit (MCO vs. Any Type) by Age Group, CY 2011–CY 2015

| Age Group (Years) | MCO Outpatient ED Visits | | | All Outpatient ED Visits (MCO + FFS) | | |
|-------------------|--------------------------|----------------|--------------|--------------------------------------|----------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| CY 2011 | | | | | | |
| 0 < 1 | 35,522 | 10,284 | 29.0% | 35,522 | 10,914 | 30.7% |
| 1-2 | 77,877 | 33,836 | 43.4% | 77,877 | 34,825 | 44.7% |
| 3-9 | 231,581 | 64,263 | 27.7% | 231,581 | 66,396 | 28.7% |
| 10-18 | 224,639 | 54,349 | 24.2% | 224,639 | 57,388 | 25.5% |
| 19-39 | 222,100 | 86,009 | 38.7% | 222,100 | 93,372 | 42.0% |
| 40-64 | 101,059 | 35,946 | 35.6% | 101,059 | 39,379 | 39.0% |
| All | 892,778 | 284,687 | 31.9% | 892,778 | 302,274 | 33.9% |
| CY 2012 | | | | | | |
| 0 < 1 | 35,832 | 10,748 | 30.0% | 35,832 | 11,394 | 31.8% |
| 1-2 | 77,213 | 34,013 | 44.1% | 77,213 | 35,041 | 45.4% |
| 3-9 | 243,308 | 67,301 | 27.7% | 243,308 | 69,557 | 28.6% |
| 10-18 | 233,551 | 56,249 | 24.1% | 233,551 | 59,297 | 25.4% |
| 19-39 | 234,312 | 89,863 | 38.4% | 234,312 | 97,152 | 41.5% |
| 40-64 | 106,108 | 37,577 | 35.4% | 106,108 | 40,836 | 38.5% |
| All | 930,324 | 295,751 | 31.8% | 930,324 | 313,277 | 33.7% |
| CY 2013 | | | | | | |
| 0 < 1 | 35,787 | 10,229 | 28.6% | 35,787 | 10,799 | 30.2% |
| 1-2 | 77,349 | 33,468 | 43.3% | 77,349 | 34,398 | 44.5% |
| 3-9 | 251,988 | 68,894 | 27.3% | 251,988 | 70,861 | 28.1% |
| 10-18 | 242,084 | 56,519 | 23.3% | 242,084 | 59,234 | 24.5% |
| 19-39 | 244,331 | 93,786 | 38.4% | 244,331 | 100,860 | 41.3% |
| 40-64 | 110,874 | 39,724 | 35.8% | 110,874 | 42,936 | 38.7% |
| All | 962,413 | 302,620 | 31.4% | 962,413 | 319,088 | 33.2% |
| CY 2014 | | | | | | |
| 0 < 1 | 36,580 | 10,219 | 27.9% | 36,580 | 10,874 | 29.7% |
| 1-2 | 78,987 | 33,356 | 42.2% | 78,987 | 34,401 | 43.6% |
| 3-9 | 264,057 | 68,440 | 25.9% | 264,057 | 70,712 | 26.8% |
| 10-18 | 260,420 | 57,694 | 22.2% | 260,420 | 61,014 | 23.4% |
| 19-39 | 365,728 | 127,927 | 35.0% | 365,728 | 140,532 | 38.4% |
| 40-64 | 245,093 | 76,779 | 31.3% | 245,093 | 84,868 | 34.6% |
| All | 1,250,865 | 374,415 | 29.9% | 1,250,865 | 402,401 | 32.2% |
| CY 2015 | | | | | | |
| 0 < 1 | 36,162 | 9,566 | 26.5% | 36,162 | 10,414 | 28.8% |
| 1-2 | 78,735 | 30,907 | 39.3% | 78,735 | 32,540 | 41.3% |
| 3-9 | 262,608 | 64,844 | 24.7% | 262,608 | 68,342 | 26.0% |
| 10-18 | 265,131 | 55,422 | 20.9% | 265,131 | 59,777 | 22.5% |
| 19-39 | 392,021 | 122,479 | 31.2% | 392,021 | 139,111 | 35.5% |
| 40-64 | 269,835 | 76,884 | 28.5% | 269,835 | 86,847 | 32.2% |
| All | 1,304,492 | 360,102 | 27.6% | 1,304,492 | 397,031 | 30.4% |



Appendix D. Inpatient Admission Rates – MCO vs. MCO + FFS

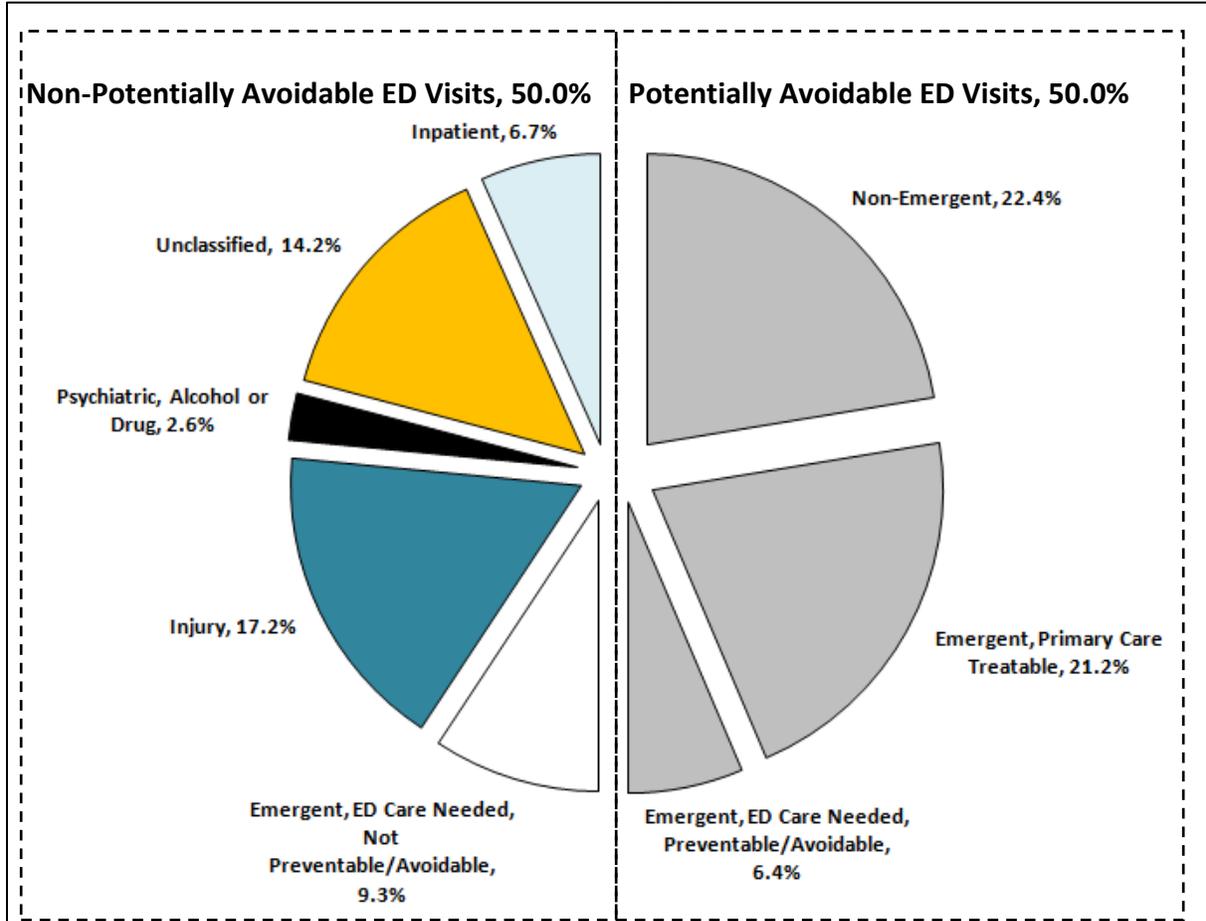
Table D1. Percentage of HealthChoice Participants Aged 18-64 Years who Received an Inpatient Admission (MCO vs. Any Type) by Coverage Category, CY 2011–CY 2015

| Year | MCO Inpatient Admissions | | | All Inpatient Admissions (MCO + FFS) | | |
|---------|--------------------------|------------------|------------------|--------------------------------------|------------------|------------------|
| | # of Participants | # with Admission | % with Admission | # of Participants | # with Admission | % with Admission |
| CY 2011 | 346,888 | 46,168 | 13.3% | 346,888 | 53,868 | 15.5% |
| CY 2012 | 364,528 | 45,104 | 12.4% | 364,528 | 52,294 | 14.3% |
| CY 2013 | 379,149 | 44,604 | 11.8% | 379,149 | 51,700 | 13.6% |
| CY 2014 | 636,719 | 57,712 | 9.1% | 636,719 | 72,302 | 11.4% |
| CY 2015 | 687,777 | 54,261 | 7.9% | 687,777 | 69,991 | 10.2% |



Appendix E. Appropriateness of ED Care – MCO-Only Rates

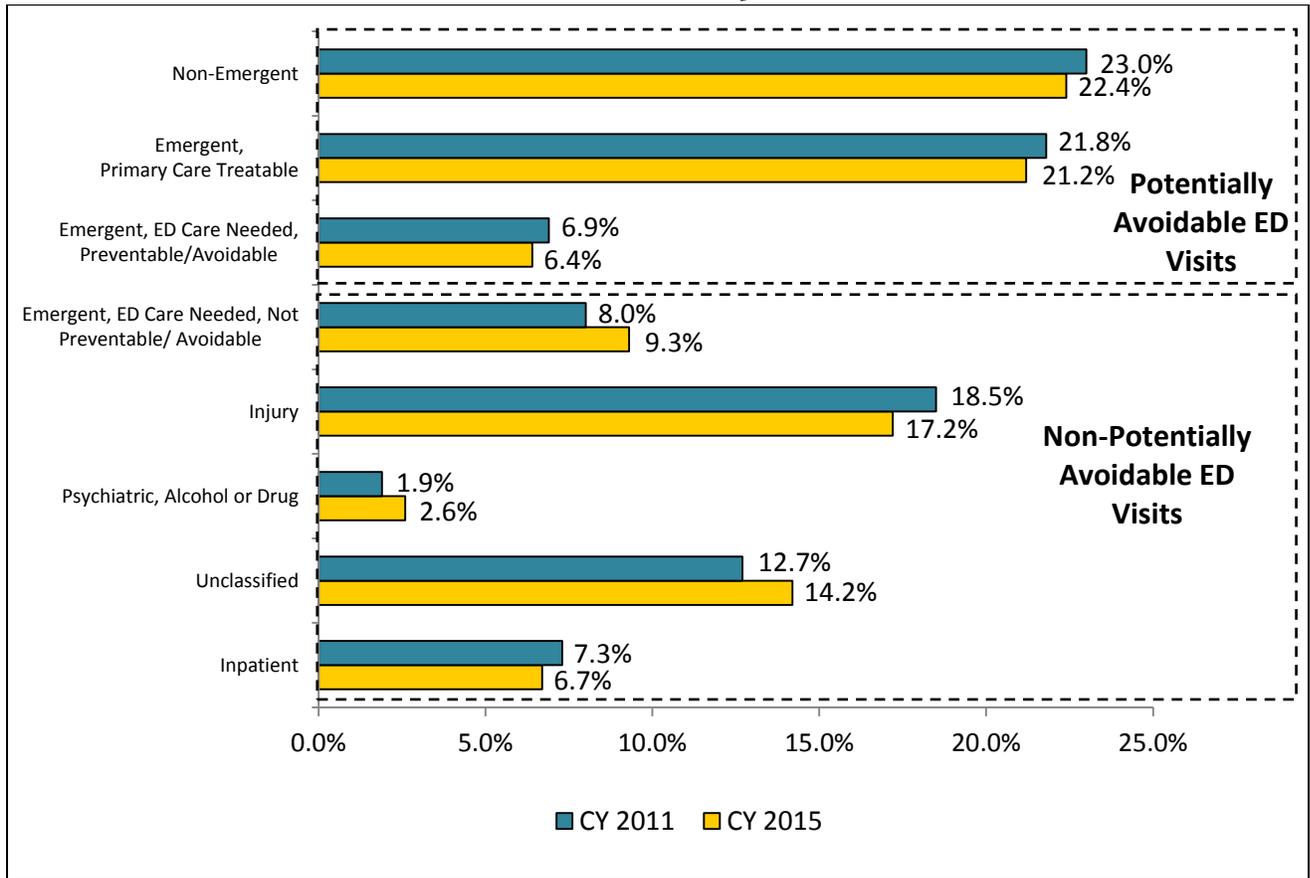
Figure E1. ED Visits (MCO Only) by HealthChoice Participants Classified According to NYU Avoidable Admissions Algorithm, CY 2015



* ED visits that result in an inpatient stay are not a part of the NYU algorithm and have been added here in their own category.



Figure E2. Classification of ED Visits (MCO Only) by HealthChoice Participants, CY 2011 and CY 2015



Appendix F. Preventable or Avoidable Admissions – MCO vs. MCO + FFS

Table F1. Number of Potentially Avoidable Inpatient Admissions per 100,000 HealthChoice Participants Aged 18–64 Years, CY 2011–CY 2015

| Any PQI # | MCO Potentially Avoidable Admission Rates per 100,000 | | | | | MCO + FFS Potentially Avoidable Admission Rates per 100,000 | | | | |
|---|---|--------------|--------------|--------------|--------------|---|--------------|--------------|--------------|--------------|
| | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 | CY 2011 | CY 2012 | CY 2013 | CY 2014 | CY 2015 |
| 1: Diabetes Short-Term Complications Admissions | 182 | 161 | 165 | 162 | 143 | 209 | 180 | 196 | 200 | 174 |
| 2: Perforated Appendix Admissions | 17 | 15 | 14 | 15 | 13 | 21 | 19 | 17 | 21 | 17 |
| 3: Diabetes Long-Term Complications Admissions | 194 | 157 | 155 | 125 | 114 | 231 | 192 | 196 | 155 | 134 |
| 5: COPD or Asthma in Older Adults Admissions (Ages 40-64) | 1,593 | 1,342 | 1,146 | 674 | 609 | 1,754 | 1,498 | 1,264 | 778 | 669 |
| 7: Hypertension Admissions | 83 | 69 | 56 | 55 | 47 | 106 | 80 | 66 | 73 | 61 |
| 8: Congestive Heart Failure Admissions | 234 | 196 | 202 | 174 | 180 | 294 | 250 | 249 | 224 | 219 |
| 10: Dehydration Admissions | 101 | 92 | 66 | 65 | 74 | 116 | 102 | 74 | 76 | 85 |
| 11: Bacterial Pneumonia Admissions | 250 | 209 | 196 | 162 | 138 | 288 | 237 | 218 | 198 | 162 |
| 12: Urinary Tract Infection Admissions | 174 | 145 | 133 | 91 | 85 | 199 | 165 | 149 | 109 | 98 |
| 13: Angina Without Procedure Admissions | 20 | 13 | 12 | 9 | 7 | 24 | 15 | 13 | 11 | 9 |
| 14: Uncontrolled Diabetes Admissions | 24 | 20 | 18 | 13 | 16 | 30 | 22 | 20 | 16 | 19 |
| 15: Asthma in Younger Adults Admissions (Ages 18-39) | 137 | 143 | 124 | 99 | 76 | 154 | 159 | 138 | 117 | 94 |
| 16: Lower-Extremity Amputation In Patients With Diabetes | 2 | 4 | 4 | 5 | 6 | 6 | 9 | 8 | 9 | 8 |
| 90: Prevention Quality Overall Composite | 1,823 | 1,557 | 1,427 | 1,178 | 1,087 | 2,117 | 1,797 | 1,652 | 1,436 | 1,280 |
| 91: Prevention Quality Acute Composite | 525 | 446 | 395 | 317 | 297 | 603 | 504 | 441 | 382 | 346 |
| 92: Prevention Quality Chronic Composite | 1,298 | 1,111 | 1,032 | 861 | 789 | 1,514 | 1,293 | 1,211 | 1,054 | 934 |



Table F2. Potentially Avoidable Admission Rates among Participants Aged 18–64 Years with ≥1 Inpatient Admission (MCO vs. Any Type), CY 2011–CY 2015⁴²

| Year | # of Participants in HealthChoice | # of Participants with ≥1 Admission | % of Participants with ≥1 Admission | # of Participants with Any PQI | % of Participants with Any PQI | % of Participants With ≥1 Admissions who had a PQI |
|---------------------------------------|-----------------------------------|-------------------------------------|-------------------------------------|--------------------------------|--------------------------------|--|
| MCO Inpatient Admissions | | | | | | |
| CY 2011 | 346,888 | 46,169 | 13.3% | 4,279 | 1.2% | 9.3% |
| CY 2012 | 364,528 | 45,104 | 12.4% | 3,963 | 1.1% | 8.8% |
| CY 2013 | 379,149 | 44,604 | 11.8% | 3,712 | 1.0% | 8.3% |
| CY 2014 | 636,719 | 57,712 | 9.1% | 5,314 | 0.8% | 9.2% |
| CY 2015 | 687,777 | 54,264 | 7.9% | 4,841 | 0.7% | 8.9% |
| MCO + FFS Inpatient Admissions | | | | | | |
| CY 2011 | 346,888 | 53,868 | 15.5% | 4,892 | 1.4% | 9.1% |
| CY 2012 | 364,528 | 52,294 | 14.3% | 4,480 | 1.2% | 8.6% |
| CY 2013 | 379,149 | 51,700 | 13.6% | 4,157 | 1.1% | 8.0% |
| CY 2014 | 636,719 | 72,302 | 11.4% | 6,454 | 1.0% | 8.9% |
| CY 2015 | 687,777 | 69,991 | 10.2% | 6,352 | 0.9% | 9.1% |

⁴² The methodology for calculating inpatient admission rates was revised for this year’s evaluation. Revisions include updating the methodology for calculating inpatient stays across years.



Appendix G.
ED Visit Rates Among MHD and SUD Populations – MCO vs. MCO + FFS

**Table G1. HealthChoice Participants who Received an ED Visit (MCO vs. Any Type)
 by MHD Status, CY 2011–CY 2015**

| Year | MCO Outpatient ED Visits | | | All Outpatient ED Visits (MCO + FFS) | | |
|------------------|--------------------------|--------------|--------------|--------------------------------------|--------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| MHD Only | | | | | | |
| CY 2011 | 91,057 | 39,484 | 43.4% | 91,057 | 43,429 | 47.7% |
| CY 2012 | 97,015 | 42,241 | 43.5% | 97,015 | 46,115 | 47.5% |
| CY 2013 | 100,623 | 43,324 | 43.1% | 100,623 | 47,036 | 46.7% |
| CY 2014 | 129,901 | 54,961 | 42.3% | 129,901 | 60,657 | 46.7% |
| CY 2015 | 143,482 | 57,232 | 39.9% | 143,482 | 63,979 | 44.6% |
| MHD + SUD | | | | | | |
| CY 2011 | 12,179 | 8,162 | 67.0% | 12,179 | 8,894 | 73.0% |
| CY 2012 | 12,563 | 8,399 | 66.9% | 12,563 | 9,066 | 72.2% |
| CY 2013 | 12,770 | 8,444 | 66.1% | 12,770 | 9,157 | 71.7% |
| CY 2014 | 23,874 | 15,507 | 65.0% | 23,874 | 16,720 | 70.0% |
| CY 2015 | 26,190 | 15,922 | 60.8% | 26,190 | 17,992 | 68.7% |
| All | | | | | | |
| CY 2011 | 103,236 | 47,646 | 46.2% | 103,236 | 52,323 | 50.7% |
| CY 2012 | 109,578 | 50,640 | 46.2% | 109,578 | 55,181 | 50.4% |
| CY 2013 | 113,393 | 51,768 | 45.7% | 113,393 | 56,193 | 49.6% |
| CY 2014 | 153,775 | 70,468 | 45.8% | 153,775 | 77,377 | 50.3% |
| CY 2015 | 169,672 | 73,154 | 43.1% | 169,672 | 81,971 | 48.3% |



**Table G2. HealthChoice Participants who Received an ED Visit (MCO vs. Any Type)
by SUD Status, CY 2011–CY 2015**

| Year | MCO Outpatient ED Visits | | | All Outpatient ED Visits (MCO + FFS) | | |
|------------------|--------------------------|--------------|--------------|--------------------------------------|--------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| SUD Only | | | | | | |
| CY 2011 | 18,327 | 10,745 | 58.6% | 18,327 | 11,387 | 62.1% |
| CY 2012 | 20,493 | 12,409 | 60.6% | 20,493 | 13,116 | 64.0% |
| CY 2013 | 19,575 | 11,524 | 58.9% | 19,575 | 12,130 | 62.0% |
| CY 2014 | 34,355 | 17,029 | 49.6% | 34,355 | 18,287 | 53.2% |
| CY 2015 | 33,769 | 15,321 | 45.4% | 33,769 | 17,397 | 51.5% |
| MHD + SUD | | | | | | |
| CY 2011 | 12,179 | 8,167 | 67.1% | 12,179 | 8,894 | 73.0% |
| CY 2012 | 12,563 | 8,399 | 66.9% | 12,563 | 9,066 | 72.2% |
| CY 2013 | 12,770 | 8,444 | 66.1% | 12,770 | 9,157 | 71.7% |
| CY 2014 | 23,874 | 15,507 | 65.0% | 23,874 | 16,720 | 70.0% |
| CY 2015 | 26,190 | 15,922 | 60.8% | 26,190 | 17,992 | 68.7% |
| All | | | | | | |
| CY 2011 | 30,506 | 18,907 | 62.0% | 30,506 | 20,281 | 66.5% |
| CY 2012 | 33,056 | 20,808 | 62.9% | 33,056 | 22,182 | 67.1% |
| CY 2013 | 32,345 | 19,968 | 61.7% | 32,345 | 21,287 | 65.8% |
| CY 2014 | 58,229 | 32,536 | 55.9% | 58,229 | 35,007 | 60.1% |
| CY 2015 | 59,959 | 31,243 | 52.1% | 59,959 | 35,389 | 59.0% |



Appendix H. Services for Individuals with HIV/AIDS – MCO vs. MCO + FFS

Table H1. Percentage of HealthChoice Participants with HIV/AIDS who Received an Ambulatory Care Visit (MCO vs. Any Type), CY 2011 – CY 2015

| Year | MCO Ambulatory Care Visits | | | All Ambulatory Care Visits (MCO + FFS) | | |
|---------|----------------------------|--------------|--------------|--|--------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| CY 2011 | 5,427 | 4,790 | 88.3% | 5,427 | 4,898 | 90.3% |
| CY 2012 | 5,242 | 4,711 | 89.9% | 5,242 | 4,790 | 91.4% |
| CY 2013 | 5,153 | 4,611 | 89.5% | 5,153 | 4,729 | 91.8% |
| CY 2014 | 5,199 | 4,737 | 91.1% | 5,199 | 4,827 | 92.8% |
| CY 2015 | 6,526 | 5,877 | 90.1% | 6,526 | 6,006 | 92.0% |

Table H2. Percentage of HealthChoice Participants with HIV/AIDS who Received an ED Visit (MCO vs. Any Type), CY 2011 – CY 2015

| Year | MCO Outpatient ED Visits | | | All Outpatient ED Visits (MCO + FFS) | | |
|---------|--------------------------|--------------|--------------|--------------------------------------|--------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| CY 2011 | 5,427 | 2,751 | 50.7% | 5,427 | 2,943 | 54.2% |
| CY 2012 | 5,242 | 2,728 | 52.0% | 5,242 | 2,898 | 55.3% |
| CY 2013 | 5,153 | 2,703 | 52.5% | 5,153 | 2,882 | 55.9% |
| CY 2014 | 5,199 | 2,709 | 52.1% | 5,199 | 2,827 | 54.4% |
| CY 2015 | 6,526 | 3,150 | 48.3% | 6,526 | 3,362 | 51.5% |



Appendix I. Racial/Ethnic Disparities – MCO vs. MCO + FFS

Table I1. Percentage of HealthChoice Participants Aged 0-18 Years who Received an Ambulatory Care Visit (MCO vs. Any Type) by Race/Ethnicity, CY 2011 and CY 2015

| Race/Ethnicity | MCO Ambulatory Care Visits | | | All Ambulatory Care Visits (MCO + FFS) | | |
|----------------|----------------------------|----------------|--------------|--|----------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| CY 2011 | | | | | | |
| Black | 275,001 | 211,285 | 76.8% | 275,001 | 213,424 | 77.6% |
| White | 148,094 | 122,263 | 82.6% | 148,094 | 123,450 | 83.4% |
| Hispanic | 90,329 | 79,676 | 88.2% | 90,329 | 80,448 | 89.1% |
| Asian | 18,618 | 15,465 | 83.1% | 18,618 | 15,606 | 83.8% |
| Other | 37,577 | 30,195 | 80.4% | 37,577 | 30,552 | 81.3% |
| ALL | 569,619 | 458,884 | 80.6% | 569,619 | 463,450 | 81.4% |
| CY 2015 | | | | | | |
| Black | 279,226 | 214,447 | 76.8% | 279,226 | 218,643 | 78.3% |
| White | 157,383 | 130,186 | 82.7% | 157,383 | 132,485 | 84.2% |
| Hispanic | 94,817 | 84,221 | 88.8% | 94,817 | 85,007 | 89.7% |
| Asian | 24,422 | 20,009 | 81.9% | 24,422 | 20,228 | 82.8% |
| Other | 86,788 | 70,144 | 80.8% | 86,788 | 71,796 | 82.7% |
| ALL | 642,636 | 519,007 | 80.8% | 642,636 | 528,159 | 82.2% |



Table I2. Percentage of HealthChoice Participants Aged 19-64 Years who Received an Ambulatory Care Visit (MCO vs. Any Type) by Race/Ethnicity, CY 2011 and CY 2015

| Race/Ethnicity | MCO Ambulatory Care Visits | | | All Ambulatory Care Visits (MCO + FFS) | | |
|----------------|----------------------------|----------------|--------------|--|----------------|---------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visits |
| CY 2011 | | | | | | |
| Black | 168,969 | 117,661 | 69.6% | 168,969 | 120,576 | 71.4% |
| White | 113,190 | 84,101 | 74.3% | 113,190 | 86,169 | 76.1% |
| Hispanic | 16,844 | 12,156 | 72.2% | 16,844 | 12,371 | 73.4% |
| Asian | 10,754 | 7,970 | 74.1% | 10,754 | 8,109 | 75.4% |
| Other | 13,402 | 8,763 | 65.4% | 13,402 | 9,028 | 67.4% |
| ALL | 323,159 | 230,651 | 71.4% | 323,159 | 236,253 | 73.1% |
| CY 2015 | | | | | | |
| Black | 306,618 | 203,661 | 66.4% | 306,618 | 211,895 | 69.1% |
| White | 224,895 | 156,977 | 69.8% | 224,895 | 164,666 | 73.2% |
| Hispanic | 31,390 | 22,781 | 72.6% | 31,390 | 23,256 | 74.1% |
| Asian | 32,427 | 21,247 | 65.5% | 32,427 | 21,776 | 67.2% |
| Other | 66,526 | 40,569 | 61.0% | 66,526 | 42,642 | 64.1% |
| ALL | 661,856 | 445,235 | 67.3% | 661,856 | 464,235 | 70.1% |

Table I3. Percentage of HealthChoice Participants Aged 0-64 Years who Received an ED Visit (MCO vs. Any Type) by Race/Ethnicity, CY 2011 and CY 2015

| Race/Ethnicity | MCO Outpatient ED Visits | | | All Outpatient ED Visits (MCO + FFS) | | |
|----------------|--------------------------|----------------|--------------|--------------------------------------|----------------|--------------|
| | # of Participants | # with Visit | % with Visit | # of Participants | # with Visit | % with Visit |
| CY 2011 | | | | | | |
| Black | 443,970 | 155,361 | 35.0% | 443,970 | 163,937 | 36.9% |
| White | 261,284 | 84,156 | 32.2% | 261,284 | 90,394 | 34.6% |
| Hispanic | 107,173 | 26,333 | 24.6% | 107,173 | 27,793 | 25.9% |
| Asian | 29,372 | 4,401 | 15.0% | 29,372 | 4,785 | 16.3% |
| Other | 50,979 | 14,436 | 28.3% | 50,979 | 15,365 | 30.1% |
| ALL | 892,778 | 284,687 | 31.9% | 892,778 | 302,274 | 33.9% |
| CY 2015 | | | | | | |
| Black | 585,844 | 186,290 | 31.8% | 585,844 | 204,470 | 34.9% |
| White | 382,278 | 104,495 | 27.3% | 382,278 | 116,195 | 30.4% |
| Hispanic | 126,207 | 28,580 | 22.6% | 126,207 | 30,329 | 24.0% |
| Asian | 56,849 | 7,362 | 13.0% | 56,849 | 8,143 | 14.3% |
| Other | 153,314 | 33,375 | 21.8% | 153,314 | 37,894 | 24.7% |
| ALL | 1,304,492 | 360,102 | 27.6% | 1,304,492 | 397,031 | 30.4% |





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